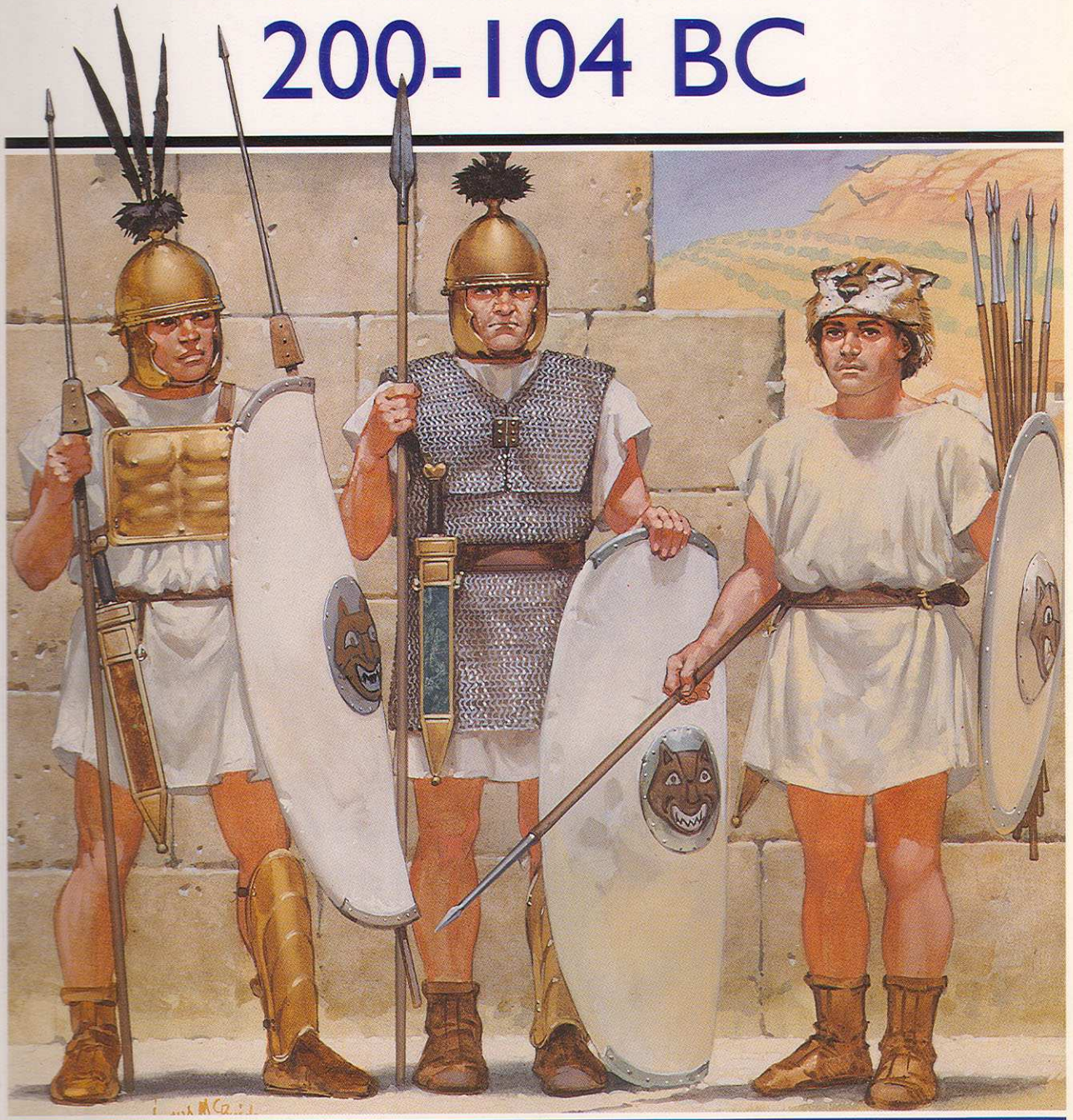
OSPREY MILITARY
MEN-AT-ARMS SERIES 291

REPUBLICAN ROMAN ARMY 200-104 BC



NICK SEKUNDA ANGUS McBRIDE

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REPUBLICAN ROMAN ARMY 200-104 BC

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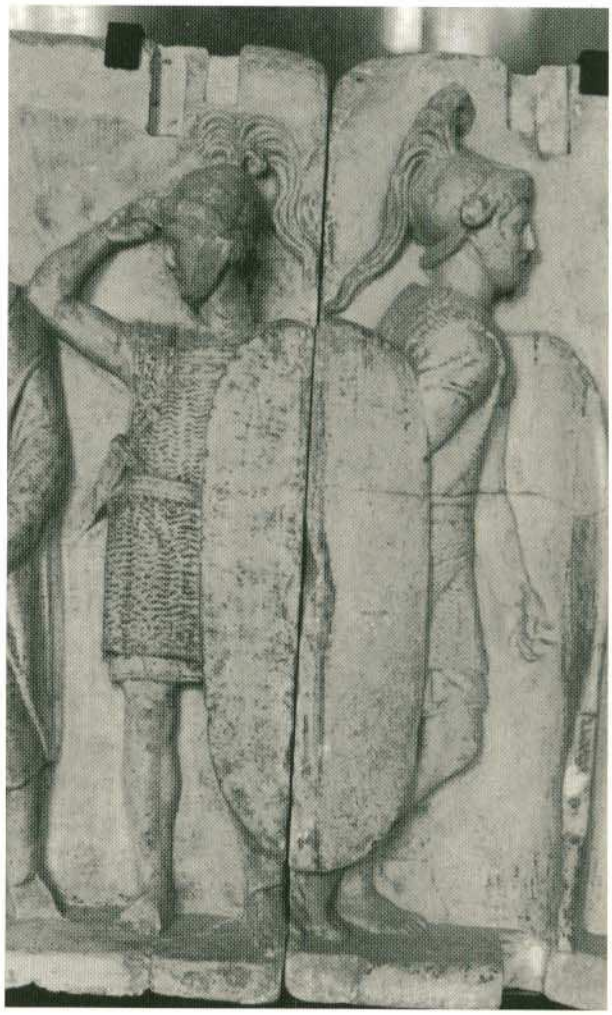
INTRODUCTION

Researchers have directed most of their effort towards the Roman Army during the Imperial period. This is hardly surprising. The Roman Imperial Army is a unique phenomenon. It is difficult to think of any other state in any historical period which managed to maintain such a large, entirely professional army for such a long time. This fact alone dictates that the Imperial Army will continue to receive the attention it deserves.

Consequently the Imperial Army is well understood, but the same cannot be said of the Republican. The further one goes back in time, the less is known about the Roman Army. The military reforms carried out by Marius between 107 and 104 BC constitute a watershed in our knowledge. After this date we have sufficient literary and archaeological evidence to give us a reasonable outline (see Harmand). The legionary organisation which Marius' reforms crystallized is attested in numerous literary passages, while the archaeological monuments, beginning with the 'Altar of Domitius Ahenobarbus', probably recording the census of Cn. Domitius Ahenobarbus in 115 BC (Torelli 5-16), show us Republican legionaries at the end of the 2nd century almost universally equipped in mail.

Before this date the situation is far from clear. Elizabeth Rawson, a pre-eminent scholar of the Roman Republic, summarised the situation thus (13): 'The subject of the arms and organisation of the Roman army in and before the mid-second century BC is one of almost inextricable confusion.' Little has changed in the two decades or more since these words were written.

Few historians have dealt with the earlier army at all, and the only lengthy treatment of the subject is that of Eduard Meyer. Brief accounts of the pre-Marian army are also given by Parker (9-20) and Keppie (14-56), and a more extended treatment by Peter Conolly (86-207). No military archaeologist can fail, at this point, to mention the remarkable excavations made by Adolf Schulten of the Roman camps in the region of Numantia in the period 1903-12. A book of this size cannot throw light on all aspects of the Roman Republican Army, but it can at least provide an outline of the equipment and organization of the army in the 2nd century, a time when Rome was growing from a regional to a world power.



Legionaries from the Altar of Domitius Ahenobarbus. *(Photo: author)*

INFANTRY EQUIPMENT

The principal source of information on both the equipment and the organization of the Roman Republican Army is the sixth book of the *Histories* of the Greek historian Polybius, written a little before 150 BC (Walbank, *Commentary* I, 636). Polybius was born about 200 BC, served as *hipparchos* of the Achaean League in 170/69, and wrote a book *On Tactics*. After Pydna, Polybius was among the 1,000 prominent Achaeans who were deported to Rome. There he became friends with Scipio Aemilianus, and accompanied him on his various travels, witnessing, among other things, the destruction of Carthage in 146. Polybius was, then, uniquely qualified to write on the subject of the Roman Army, and his description of Roman military equipment is probably based on his own experience and observation.

Senior officer, possibly a tribune, from the Altar of Domitius Ahenobarbus. *(photo: author)*

Right *Cavalryman from the* Altar of Domitius Ahenobarbus. *(photo: author)*

The Roman shield

Polybius (6. 23. 2-5) gives a complete account of the Roman shield. It had a curved surface approximately 75 cm wide and 1.4 m high, and a span of 10 cm. (Here Polybius probably means that the rim curved back a span from the front of the shield.)(Treloar). It was made of 'double planking'; presumably two layers of wooden ply glued together and then covered on the outer side first with canvas and then with leather. The rim had an iron trim on its upper and lower edges, protecting the shield against sword-blows from above and against the earth below. It also had an iron boss which would have turned aside the heaviest blows from missiles.

The ancient authorities inform us that the Roman shield was of Samnite (Athen. 6. 273 f) or Sabine (Plut. *Vit. Rom.* 21. 1) origin (cf. Eichberg 171-5). Perhaps large wooden shields of this type were ultimately of Celtic origin.

The Kasr el-Harit shield was found in the Egyptian Fayum by an English team of papyrologists in 1900. Its measurements correspond remarkably well to the dimensions given by Polybius. However, the shield has no iron rim or boss, and is oval rather than round in shape. It is covered in woollen felt on both sides, the inner lining overlapping the outer by 50-60 mm. The body of the shield is made up of three layers of thin wooden segments running in alternate directions, vertically and horizontally. The segments on the outside and inside of the shield, between 25 and 50 mm wide, run horizontally; the inner side of the shield comprising 40 segments. The middle layer comprises ten segments, 60-100 mm wide running vertically.

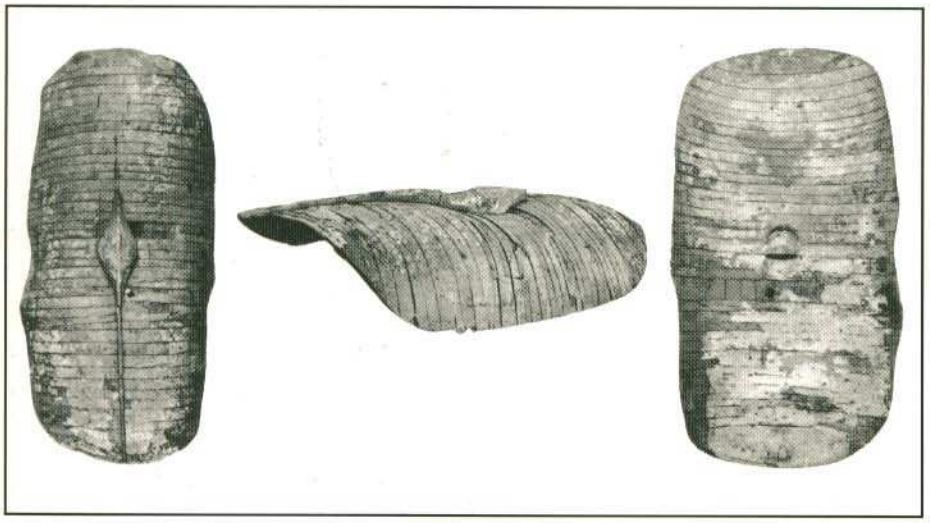
For the method of construction we may compare Varro (Ling. 5. 115), who tells us that the Latin word *scutum* is derived from *sectura* or 'cutting', because it is made of wood cut into small pieces. Whatever the truth of Varro's etymology

he confirms that the Roman shield was made from ply. Kimmig thought the Kasr el-Harit shield was probably made of birch wood. Pliny (*NH* 16. 209) tells us that the most suitable woods for making shields are those in which an incision causes the wood to draw together at once and close its own wound; these include vine, willow, lime, birch, elder and both kinds of poplar.

At the centre of the shield is a wooden 'barleycorn' boss, attached with iron nails, with a wooden *spina* running above and below to the rim. The remains of iron rings for attaching carrying-straps are also found on the inside of the shield. Peter Connolly produced a reconstruction of the Kasr el-Harit shield which weighed 10 kg. The shield was found among houses which all seemed to belong to the late Ptolemaic period, which led Kimmig, the original publisher, to suggest that the shield had belonged to a Celtic mercenary in Ptolemaic service. Later commentators have suggested that the shield is Roman. As the late Ptolemaic army adopted Roman military equipment, certainty in this matter is impossible.

Vegetius (2. 18) informs us that each cohort painted different signs on their shields, and each soldier wrote his name, his cohort and his century on the back. This may have been the practice in the Imperial period, but we have no unequivocal evidence that the different units of the Roman Army decorated their shields in any distinctive way in the Republican period. Livy (27. 47. 1) describes how in 207 BC, on the eve of the Battle of the Metaurus River, Hasdrubal observed among the enemy old shields which he had not seen before. The Roman Army had been reinforced by the Second Consular Army following a forced march. It seems that Hasdrubal can distinguish the 'new' old shields from the normal shields he was familiar with, and the natural way in which to

Above *This sculpture, from the Basilica Aemilia in the Roman Forum, shows the legend of Tarpeia, who offered to betray Rome to the Sabines in return for 'what they wore on their left arms'; meaning their gold ornaments. As they passed Tarpeia they killed her by throwing their shields upon her. The Basilica was first erected in 179, but was reconstructed many times subsequently, which makes dating any individual sculpture most uncertain. Some authorities (Bandinelli & Torelli fig. 49) would attribute this particular sculpture to the Sullan reconstruction phase of 87-78. The shield is decorated with a winged animal, possibly a feline, but more probably a horse. The 'Pegasus' is a common coin blazon of many Italian cities of the Republican period. Its significance is unknown but the sculptor evidently thought it a suitable device for a Sabine. (Photo: Deutschen Archäologischen Instituts, Rome)*



Photograph of the Kasr el-Harit shield, (left) outside (centre) side and (right) inside, taken from the original publication. (Photo after Kimmig)

Cross-section showing the triple-ply construction. Polybius probably examined a number of Roman shields, but only visually. This could be the reason why he states that the shield is constructed from 'double planking', rather than triple. (Drawing after Kimmig 108 fig. 1)

interpret this passage would be to assume that the 'new' old shields had different shield devices which Hasdrubal had not seen before. This is hardly, however, a passage on which to pin any conclusive argument.

Frontinus (*Strat.*, 4. 1. 5) records that Scipio Africanus, upon taking over command of the Roman Army besieging Numantia in 134 BC, saw a soldier with an elegantly decorated shield. Scipio remarked that he didn't wonder that the soldier had decorated it with such care, since he obviously put more trust in it than in his sword. It is not immediately obvious whether this passage implies that each soldier decorated his own shield as he wished, or simply that the individual soldier was responsible for decorating his own shield in the pattern prescribed for his unit. Furthermore, the anecdote may not be genuinely recorded, for other versions of the story (eg. Livy, *Per.* 57) make the size of the shield the point of the story, not its decoration. Finally, Silius Italicus (17. 395-8) gives Scipio a shield decorated with effigies of his father and uncle in battle

Helmets

During the 2nd century soldiers of the Roman Army were obliged to supply their own equipment, or at least their arms were their own property. Consequently, we should not expect to find complete uniformity in dress or equipment. As the 2nd century progressed the demand for military equipment increased as a result of incessant war and an ever-increasing scale of mobilisation. At the end of the 2nd century Marius was recruiting volunteers from the lowest property classes into the legions, and these troops would have been unable to bring their own arms with them.

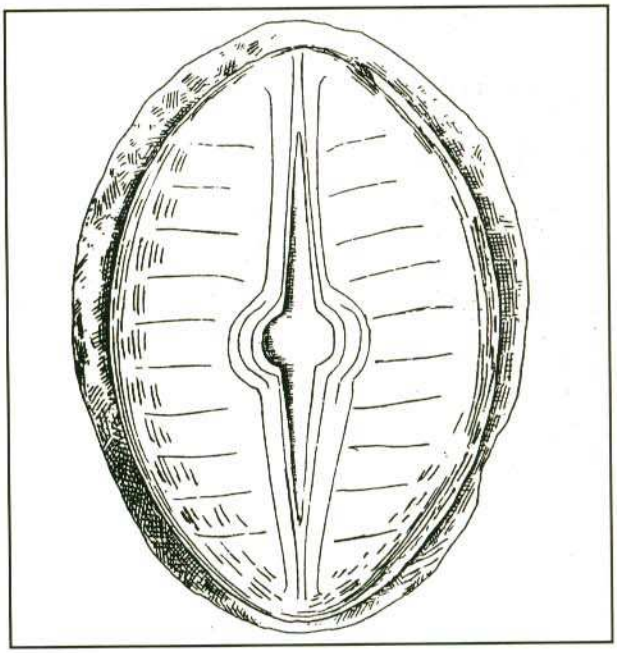
Most helmets surviving from the Republican period are of the 'Montefortino' type, named after the cemetery of Montefortino in Ancona, from which a large number were excavated. A number come from battle-sites in Greece (Calligas). Until

the end of the 2nd century the bowls of the helmet were decorated and finished well, with the brim ending in a fine rope-work coil. Some 2nd-century helmets are stamped with an armourer's mark countersunk into the bronze with a die, implying some form of mass-production even at this early date. There was, however, a marked deterioration towards the end of the century, as demand increased. Even so, helmets continued to be produced by hammering; spinning only seems to have come in during the early years of the Principate (Paddock).

The earlier examples of the Montefortino helmet come together into something of a point at the top. Varro (*Ling.* 5. 115) tells us that the type of helmet known as *conus* is so-called because it narrows (*cogitur*) towards the top. Thus the term *conus* may have been a specific word for the Montefortino type. The Greeks also used the word *konos* of a certain type of helmet; obviously a borrowing has taken place, though it is not clear which way round.

At the top of the bowl of the helmet was a crest-knob, filled with lead and then drilled with a hole in the middle for the insertion of a crest-pin. Thus the crest-pin was held firmly in an upright position (Russell Robinson 14). The crest consisted of what Polybius (6. 23. 12) calls a feathered 'wreath' or 'crown', with three straight crimson or black feathers stretching above, about a cubit (45 cm) in length. The latter must have been wing-feathers taken from some very large bird. Statius, a poet of the Flavian period, describes some mythical Spartans wearing 'Ledaean' crests (i.e. of swans' feathers). Virgil (*Aen.* 10. 185-193) also has the Ligurian heroes Cunerus and Cupavo wear crests of swans' feathers. (The swans of the river Po were famous in antiquity.) The nature of the wreath or crown beneath the crest proper is not known. It may have resembled the white band (*infula*) wound into the scarlet crest of another helmet (*conus*) described by Statius (*Theb.* 4. 218).

The Montefortino helmet has become the standard helmet worn by all modern reconstructions of the Roman soldier during the 2nd century BC. However, it may not have been the only type of helmet in use. The Italo-Corinthian and the Italo-Attic types had earlier been very popular too, especially in regions to the south of Rome, such as Campania or Apulia. These may have continued in use into the 2nd century, though examples have not survived – perhaps due to the end of rich burials in this region. The Italo-Attic type had been especially popular among the Samnites, and did continue in use: it developed into the Imperial-Italic type, which emerged in the 1st century AD (Russell Robinson 62).



The ply construction of the shield is demonstrated by this funerary sculpture from Vetulonia, normally dated to the early seventh century. (After Studi Etruschi 21 (1950-51) p. 28 fig. 3)

The cuirass

Polybius (6. 23. 14) informs us that those who were rated in the census-class above 10,000 drachmas wore a coat of mail armour (*lorica hamata*), which was of Gallic origin (Varro, *Ling.* 5. 116). A leather jerkin called the *thoracomachus* was probably worn under the mail shirt in this period, as in later periods (*De Rebus Bellicis* 15). A law passed during the first tribunate of C. Gracchus in 123 BC provided for the free distribution of arms to every single citizen-soldier in the army, at public expense (Gabba 6-7), and it seems reasonable to assume that all legionaries would be issued with mail cuirasses after that date.

Polybius, writing decades before the free distribution of arms was introduced, tells us (6. 23. 14) that the majority of the heavy infantry wore the *kardiophylax*, or 'heart-protector' (*pectorale*), a bronze sheet about 22.5 cm square placed in front of the chest and kept in place by leather thongs (Varro, *Ling.* 5. 116). Polybius is not, therefore, describing the 'Campanian' *pectorale* of triple disc shape, or the round *pectorale* worn by the mountain tribes of the central highlands, such as the Hernici, Aequi and Volsci (Connolly 101). Rather the shape had developed out of the square breastplates worn by the Samnites (Connolly 110-111) and adopted after early military contacts with them. In fact Pliny (*HN* 34. 43) does mentio that following his defeat of the Samnites in 29 Spurius Carvilius made a statue of Jupite Capitolinus from their captured 'heart-protectors' greaves and helmets. No contemporary squar *pectorale* has survived. It has been suggested that round bronze disc, 170 mm in diameter, recovere from Numantia, might be a *pectorale* (Bishop Coulston 59). The pectorale may have disappeare from use soon after Polybius description, replace by the mail shirt.

The mail cuirass was also ultimately of Celtic origin. This statuette of a Gaul, from Baratela, Este, shows a cuirass not fitted with shoulder-guards after the Greek fashion. Rather, in the Celtic fashion, the mail falls over the shoulders in two flaps, secured by a clasp in front of the chest. (Drawing after Montelius)

A third type of cuirass, the muscle-cuirass must also be considered. Though not mentione by Polybius, a large number of examples hav been recovered from graves in Campania and elsewhere, and representations continue to show th muscle-cuirass in use into the 1st century BC. O the infantrymen shown fighting on the Roma side on the Aemilius Paulus monument, two wea mail shirts, but three wear muscle-cuirasse (Kähler).

Greaves

Polybius (6. 23. 8) only mentions 'greave' in th singular, indicating that only one greave wa worn. The wearing of the single greave may hav been a native Italian practice. Livy (9. 40. 3) mentions that the Samnites wore a single greave o their left leg during a battle with the Romans i 310 BC. Following the Samnite defeat, th Campanians equipped their gladiators in this way and called them Samnites (9. 40. 17). In Rom Decimus Junius Brutus was the first Roman t give a gladiatorial exhibition in memory of hi dead father, in 264 BC (Livy, *Per.* xvi). Subsequently a single greave on the left leg wa regularly worn by that class of gladiator called 'Samnite' (Juvenal 6. 256-7; cf. Silus Italicus *Punica* 8. 419; Virgil, *Aen.* 7. 685-690). Representations of the late Republican perio showing armed men wearing a single greave o the left leg generally represent gladiators, and n unequivocal representations of soldiers wearing

Infantrymen from the Aemilius Paulus Monument. The Roman forces raised for the Third Macedonian War included 2,000 Ligurians (Livy 42. 35. 5-6). The two figures on the right, *from a part of the frieze showing the start of the battle, wear muscle-cuirasses with large rolled-over rims at the bottom and could represent the Ligurian infantry who were involved in the opening skirmish. The very large, almost hexagonal, shields could be the Ligurian shields specifically mentioned by Livy 44. 35.19. Note the drill-holes at the waist for the attachment of model swords in bronze. (Photos after Kähler, pls. 14, 6)*

single greave have survived. The Aemilius Paulus monument and later representations of Roman legionaries do not show any greaves being worn, so the single greave was possibly abandoned early in the 2nd century.

The pilum

Polybius (6. 23. 9-11) tells us that *pila* were constructed thus: a barbed iron head 1.35 m long was inserted for about half its length into a wooden haft of the same length and was riveted securely in place. The total length of the *pilum* was 1.8 m. Where it met the wooden haft the iron head was about 3.75 cm thick. Examples of such *pila* have been recovered from the Roman camps around Numantia (Bishop & Coulston 50), upon which source Peter Connolly (131) has based his reconstructions. The iron head of the javelin, designed for use against more distant targets, was attached to the haft by a socket.

The *pilum* was primarily thrown with the aim of killing the enemy, but if it didn't kill, it was designed to render the shields of the enemy unusable. A single *pilum* might pierce two separate shields and fix them together, or the iron of the extended socket might become so bent that it couldn't be plucked out of the shield (Caes., *Bell. Gall.* 1. 25. 3). Plutarch (*Vit.Mar.* 25. 1-2) describes the famous improvisation which Marius made to the *pilum* shortly before the Battle of Vercellae, against the Cimbri in 101 BC. Up to this time, Plutarch says, the iron head was fastened to the shaft with two iron rivets. Marius replaced one of these with a wooden peg. When the *pilum* struck the enemy's shield, the wooden peg sheared while the single iron peg stayed intact. The iron head stuck fast in the shield, while the wooden haft jack-knifed, swung downwards and dangled from the single iron peg, trailing along the ground at an angle.

The Spanish sword (*gladius*)

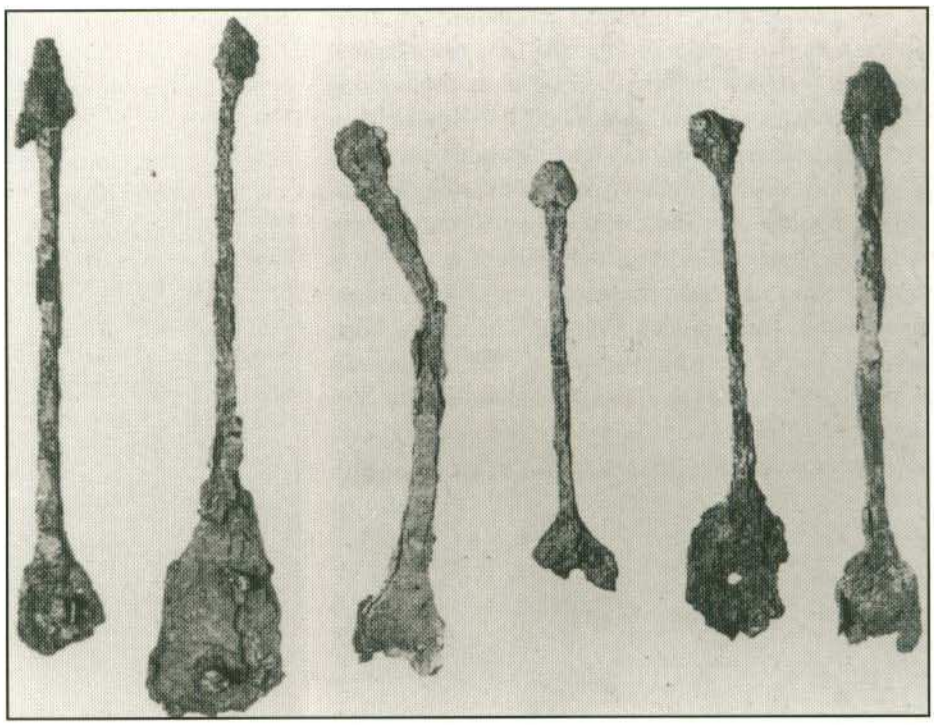
All heavy infantry carried a Spanish sword at the right hip. It was an excellent thrusting weapon, since the blade was very strong and firm, and

Left and right *This terracotta from Caere, probably the war god (Maule & Smith 5), may represent the appearance of an allied infantryman in the 2nd century. He is saluting with his right hand. Note the muscle-cuirass, sword hilt and shield, and helmet with raised cheek-pieces. (Photo & drawing: Staatliche Museen zu Berlin Preussischer Kulturbesitz Antiken - Sammlung)*

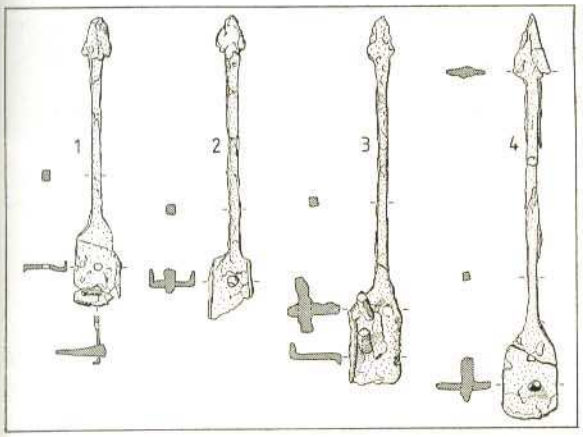
This bronze figur once in the Collectio Gréau, shows bearded male, possibl a soldier rather than gladiator, wearing cloak, the sho Samnite tunic wit wide belt, and a sing greave on the left le (Drawing aft Froehner, no. 103

both its edges cut effectively (Polyb. 6. 23. 6-7). The Spanish sword made a tremendous impact on the Macedonians. Livy (31. 34. 4) describes the dismay which swept through the Macedonian army when they saw what damage the Spanish sword had inflicted on the bodies of the dead during a skirmish in the early stages of the Second Macedonian War. In many it had severed limbs or decapitated the corpses. According to Polybius, the Spanish sword was adopted during the Second Punic War, but its adoption may have taken place earlier (Walbank, I 704, III 754).

A fragment from Poseidonius (Diodorus 5. 33. 3-4), who had travelled extensively in the weste Mediterranean, describes the weapons of th Celtiberians. They carried swords which we two-edged and wrought of excellent iron, and ha daggers 22.5 cm long which they used when figh ing at close quarters. He describes how they use to bury iron plates in the ground and wait till th rust had eaten away all the softest metal. The then worked the remaining, most unyielding, ste into excellent swords. The Roman military dagg (*pugio*), presumably also of Spanish origin, is n mentioned by Polybius, and may have only bee adopted by the Romans in the later 2nd or eve the 1st century (Bishop & Coulston 54-5).



Right and below *About 60 iron pilum heads have been recovered from Telamon, perhaps from a monument commemorating the victory against the Gauls in 225. The temple was built about 300 and was destroyed by Sulla's troops in 82 because Marius had landed there in 87, so they are certainly Republican in date. The preserved length varies from 18.8 - 35 cm. (Photo and drawing after von Vacano (1988) abb. 5, taf. xi)*



ORGANIZATION OF THE LEGIONS

Polybius' description of the administration of the military oath, or of the setting-out of the camp, are described from the point of view of the military tribunes. Consequently Rawson (15) has suggested that one of his literary sources consisted of some *commentarii* of military tribunes. These probably took the form of records of, or directions for, a single event. Cato the Elder (234-149 BC) wrote a work entitled *De Re Militari*. The surviving fragments take the form of a handbook of practical information concerning Roman military practices (Astin 184), similar in style to the *commentarii* used by Polybius. The date of its composition is unknown, though it is probable that all of Cato's written works were composed in his later years, thus at about the same time Polybius was writing book six. When Polybius comes to the levying of the cavalry he does so after dealing with the levying of the infantry, and he corrects himself to say that in reality the cavalry is now levied first, making it clear that his source is not absolutely contemporary. It is unlikely, however, that his account is very far out of date (Rawson 14-15).

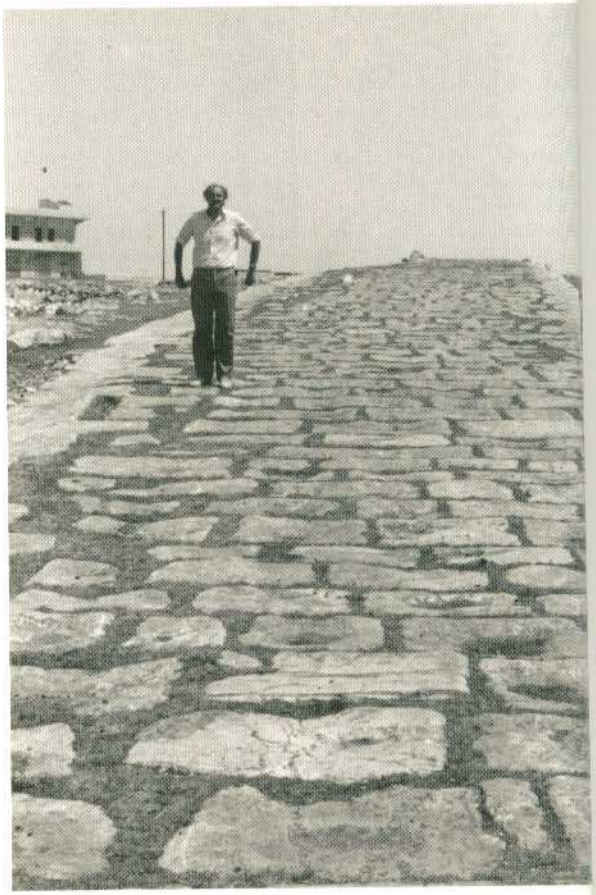
The levy

Service in the legions was the right and the duty of the *adsidui*, the body of the citizenry owning property of at least 400 denarii in value and so able to support themselves financially (Keppie 33). A census was held every five years, in which the *adsidui* were registered in tribes and distributed into five classes according to wealth. The census concluded with a religious ceremony of purification, known as the 'lustration' (*lustratio*). The *pro-*

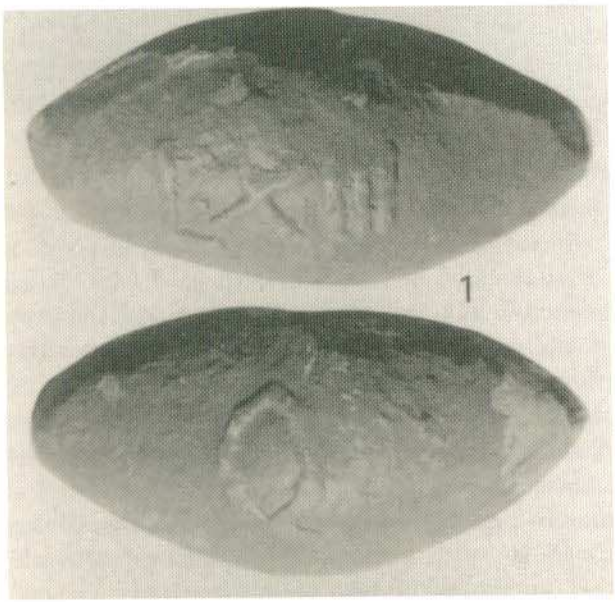
letarii, citizens whose property fell below the minimum levy for inclusion in the census classes, were not normally required to serve in the legions during this period, other than in times of dire emergency. Roman males became eligible for military service during their 17th year (Gell., *NA* 10. 28), and were only required to perform military service, as *iuniores*, until their 46th (Cic., *de sen.* 60). In times of emergency, such as the mobilisation of 171 BC for the Third Macedonian War, the oath could be administered to the *seniores* up to their 50th year (Livy 40. 26. 7; see Taylor 86). Normally citizens were required to perform six years of service continuously in the same legion, or sometimes in separate levies. They could serve as long as 16 years in the infantry or ten in the cavalry, and even longer as a volunteer. When an army was levied, the citizens would meet in a *dilectus*, or 'choosing', at which they were allocated to the various legions. Infantry were paid one third of a *denarius* daily, cavalry a full *denarius*, and from this deductions were made for food and equipment (Keppie 33–4).

The legion

The basic unit of the Roman Army was the legion. *Legere* means 'to gather together' and the word 'legion' means a force gathered together in the levy (Varro, *Ling.* 5. 87; cf. Plut., *Vit. Rom.* 13. 1). Under normal circumstances the army numbered four urban legions (*legiones urbanae*, *Polyb.* 6. 19. 7), two under the command of each of the two consuls. The consular legions would normally be numbered I to IV. During the Second Punic War there were upwards of 20 legions in the field, and it may well have been during this period that the supplementary legions started to be numbered on a regular basis.



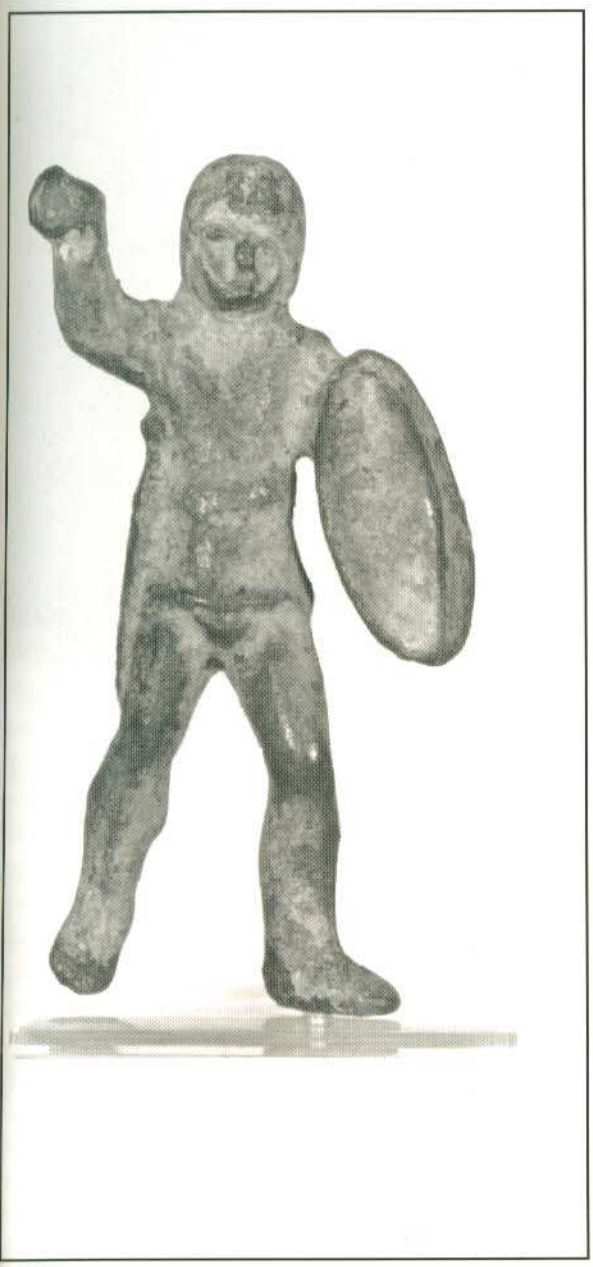
A Roman military road near Antioch in northern Syria. The Roman military historian Boris Rankov is walking along it to demonstrate that it was designed to be capable of accommodating a legionary **contuburnium** *marching six abreast. (Photo: author)*



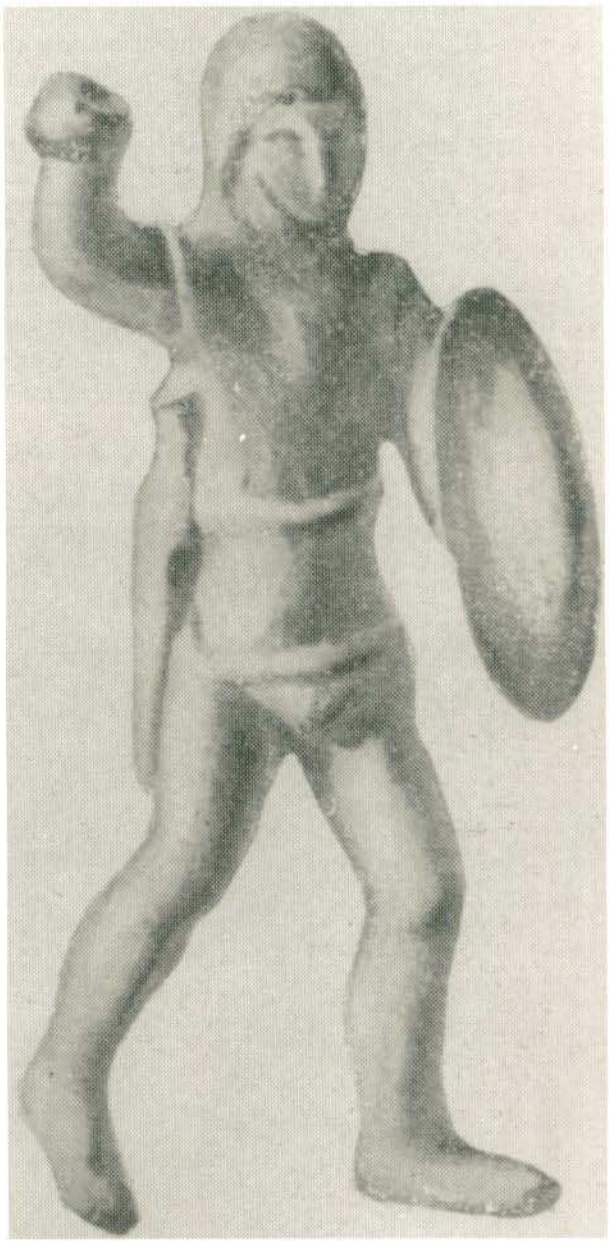
Moulded slingbullets bearing the inscription L. XIII, standing for legio XIII, have been found in Spain, deposited by the Scipionic forces attacking the Carthaginian camp at Gandul during the final phases of the Second Punic War. They can probably be associated with the 13th Legion which Livy (29. 2. 9) informs us was serving there in 205. On their reverse the bullets have the letter Q, and other bullets have the letter A in Etruscan cursive script, indicating the area of recruitment of their users. (Photos: L. Villaronga)

Numbered legions are also mentioned participating in the Istrian expedition of the consul A. Manlius Vulso in 178 BC (Agnew).

Each legion had six tribunes attached to it (Polyb. 6. 19. 8-9). Service as a tribune brought great honour, and even ex-consuls would serve as tribunes (Suolahti; Keppie 39). Normally the six tribunes divided themselves into three pairs, each pair taking it in turns to command the legion for two months (Polyb. 6. 34. 3). (The pair may have taken it in turns to command the legion on alternate days (Walbank II 583-4).) In the Imperial period the legion was commanded by a *legatus*. Polybius does not refer to military *legati*: they became increasingly common as the 2nd century drew on, though still not as legionary commanders (Rawson 19; cf. Keppie 40).



Third-century bronze statuette, height 7 cm, in the Villa Giulia, Rome, possibly representing a veles. *Note the covering to the head, the* parma velitaris, *and the sword by his side. (Drawing after Ausonia 2 (1907) 281 fig. 2; photo Sopr. Arch. Etruria Meridionale)*



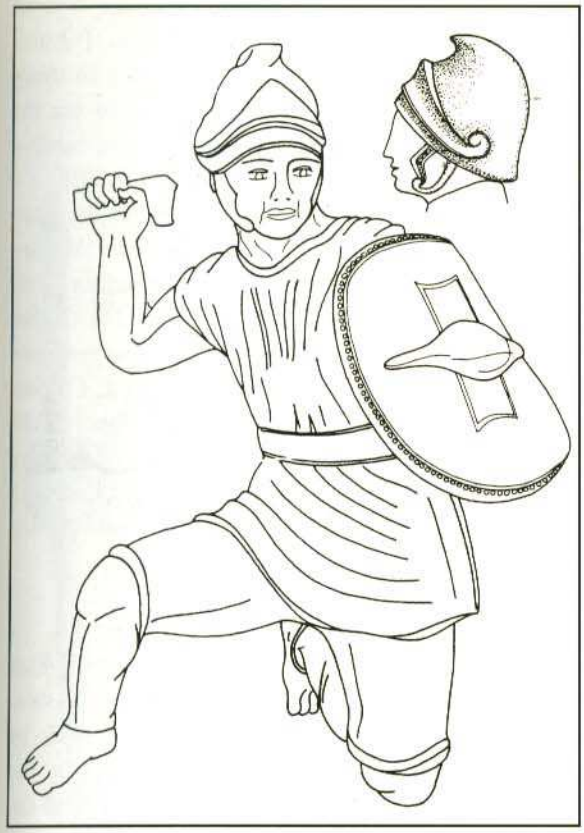
The cohort

The legion had a strength of 4,200 infantry (Polyb. 6. 20. 8). Later on it was divided into ten cohorts, each numbering 420. Polybius describes the way in which the officers of the legion were selected. This need not imply that the cohort didn't exist as a tactical sub-division of the legion, for Polybius, reflecting the interests of his source, doesn't explicitly describe the organization of the legion: rather he is concerned with the duties of the tribunes, such as the way in which the military oath is administered

Livy (22. 38. 2) tells us that the military oath was first administered to the army by the tribunes in 216 BC, on the eve of the Battle of Cannae. Previously there had only been a general oath to assemble upon the orders of the consuls, and an oath taken by the centuries of infantry and decuries of cavalry not to leave the ranks. Rawson (17) has noted that if Livy is correct upon this matter, a *terminus ante quem* of 216 BC is supplied for the literary sources of Polybius. In all likelihood his sources will, in fact, be considerably later than that date.

Some gladiators on foot used the **parma velitaris** *too. This comic figurine in the Louvre, from Smyrna, shows an ape equipped with a 'popanum'* **parma** *imitating such gladiators. (Photo: author)*

Many types of **hastae** *were in use during the Republican period. This relief (Diebner Is. 21), dating to the first years of the 1st century, shows a group of Roman marines equipped with shields and Montefortino helmets. The peculiar shape of the spear heads may be distinctive of the* **hasta navalis**. *(Photo Deutschen Archäologische Institut, Rome)*



Bronze figurine from Telamon, height 11.2 cm, usually dated to 250-150 and frequently stated to represent a Gaul at the Battle of Telamon in 225 (cf. Maule & Smith 47 n. 97). Von Vacano (1985, 140-142) has pointed out that the figure lacks the torques worn by Gauls and that the helmet is not Celtic. The two (sic) greaves and the tunic indicate that the figure represents a Roman soldier, possibly one of the hastati. *(Photo: Museo Archaeologico, Florence; drawing after von Vacano)*

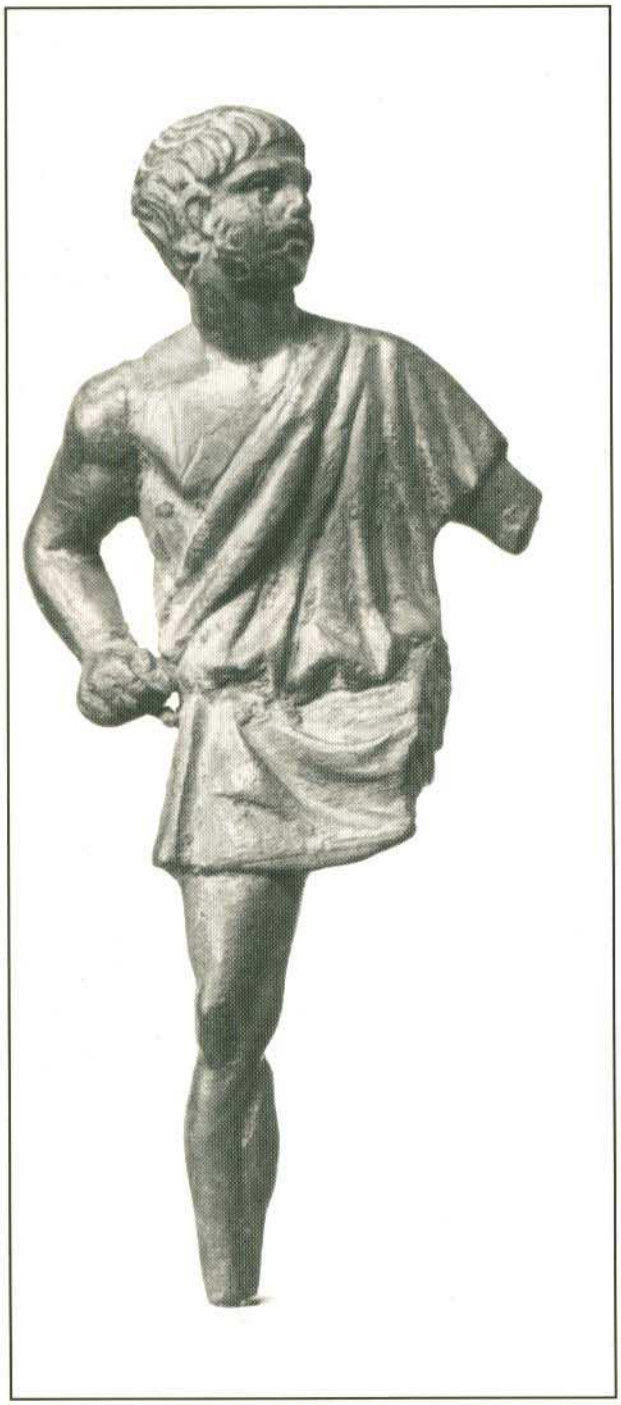
The meaning of the Latin word *cohors* is uncertain (Keppie 235 n. 7). While dealing with the defeat of Hasdrubal, son of Gisco, by Publius Scipio, in 206, Polybius describes a combined arms column in which three *ilai* of cavalry precede 'the usual number' of *velites* (presumably the equivalent of three maniples), and three *speirai* of infantry. He then digresses that the Romans use the word 'cohort' for this formation (*syntagma*) of infantry. It has been suggested that Polybius is describing an *ad hoc* formation, which only became regularized by the Reforms of Marius (Keppie 67-8).

From time to time a number of cohorts could be grouped together for a specific tactical task, in which case they might be put under the charge of one of the tribunes. The first mention of a *cohors Romana* comes in 212 BC (Livy 25. 39. 1; Front. 2. 6. 2), and Bell (415) has suggested that the elder Scipios introduced it. Whatever its origins, the cohort does not seem to go far back into the 3rd century, and it has been suggested that in the early stages of its development the cohort consisted of three maniples of any of the *ordines*, i.e. three maniples of *hastati* or of *principes*, as well as the later pattern of one maniple from each of the three *ordines* (Rawson 19 n. 20).

The maniple

Each cohort consisted of one maniple of *triarii*, numbering 60 men, one of *principes*, numbering 120, one of *hastati*, also numbering 120, plus 120 *velites*. The maniple is generally called a *sémaia*, though in one passage Polybius (6. 24. 8) uses the terms *sémaia* and *speira* indiscriminately to describe the maniple. The Latin term *manipulus* is clearly derived from *manus* (hand) which led to some rather fanciful etymological derivations in

the ancient sources. Thus Plutarch (*Vit. Rom.* 8. 6) tells us that Romulus divided his forces into companies of 100 men, each led by a man carrying a standard consisting of a handful of grass and wood tied to a pole. In fact the word 'hand' has an early history as a term for a military subdivision and Herodotus uses the Greek word *cheir* (hand) of a body of troops on a number of occasions (5. 72; 7. 20; cf. 7. 157). In the main, Polybius seems to use the word *speira* specifically to translate 'cohort', but sometimes he seems to use the term in place of *ordo*; that is, the line of battle of *hastati, principes* or *triarii* (Walbank II 302).



It has frequently been suggested that the maniple was discontinued following the Marian reforms, but in fact it seems that it continued well into the Imperial period (Speidel 10). Aulus Gellius (*NA* 16. 4. 6) preserves a passage drawn from book six of the *De Re Militari* of L. Cincius, a grammarian and antiquary active in the middle of the 1st century BC, describing the army after the Marian reforms, which mentions that in a legion there are 60 centuries, 30 maniples and 10 cohorts.

The century

Each maniple was divided into two centuries, each commanded by a centurion. In battle the two centuries of the maniple would be drawn up side by side, the one on the right commanded by the senior centurion of the two (*centurio prior*) and the one on the left by the junior (*centurio posterior*). When the officers of the legion were being selected, all the *centuriones priores* were selected first, and all centurions holding this designation were superior in rank to every *centurio posterior*. The first centurion to be selected was the senior centurion of the legion, and he commanded the first century of the first maniple of the *triarii*. In later periods he was known as the *primus pilus prior*, though it is not known how far back the title went. Livy mentions the rank anachronistically in a number of references stretching back into archaic times, though his reference (42. 34. 11) to Spurius Ligustinus holding the rank shortly after 191 BC may be genuine.

The centuries of *hastati* and *principes* each numbered 60 men, and there is some evidence to in

Bronze figurine, probably Roman and, to judge by the 'designer stubble' beard, dating to the middle of the 1st century. Head, right arm and shoulder are pushed through the right arm hole to allow maximum freedom of movement. Although all weapons are broken away it probably represents a soldier; perhaps one of the **antesignani**. *(Photo: Louvre)*

Third-century bronze statuette, height 9 cm, in the Villa Giulia, Rome. The dating is supported by the simple oval shape of the shield. It could represent a princeps *or a* triarius, *as both used the fighting-spear at this date. Note the Montefortino helmet and sword fastened on the right-hand side. The figure wears a simple tunic without mail cuirass or* pectorale. *(Drawing after Ausonia 2 (1907) p. 282 fig. 3; photo: Sopr. Arch. Etruria Méridionale)*

cate that each century was further divided into *contubernia*, or 'tent-parties' of six men each (Wheeler 312). Excavations of the Roman camp at Nobilior in Spain suggest that the centuries encamped in ten *contuburnia*, and this evidence is supported by Josephus (*BJ* 3. 124; 5. 48), who informs us that in the 1st century AD the Roman legion marched six abreast; presumably the legion is marching by *contuburnium* abreast.

The *principales*

The common soldiers of the century were known as *gregarii*. Each century had attached to it a number of staff, known as *principales*, who generally did not fight in the ranks of the century when it was drawn up for battle, but who were probably still counted as belonging to the *manipulares*. Polybius (6. 24. 2; cf. Festus s.v. *Optio*) tells us that each centurion appointed an *optio*. In the Imperial period the *optio* carried a large staff with which to beat men back into the ranks. He probably stood behind the century on the left-hand side

(Speidel 24-5). Livy (8. 8. 18) mentions each centurion choosing a *subcenturio* during the Latin War (340-338 BC). He may be alluding to an early equivalent of the *optio*, or to a previous method of selecting the *centurio posterior* of the maniple.

Polybius also tells us (6. 24. 6) that the centurions chose two standard-bearers for each *speira* (here presumably with the meaning 'maniple'). Polybius has probably made a mistake. Varro (*Ling.* 5. 88; cf. Lucan 1. 296) tells us that in his time (he composed the *De Lingua Latina* in 47-5 BC) the maniple was the smallest sub-unit in the legion to have its own standard, and this was presumably also the case earlier on in the 2nd century. Perhaps Polybius' source stated that the senior centurion of the maniple chose a standard-bearer, but Polybius has misinterpreted the text to imply that both centurions in the maniple chose a standard-bearer. Each maniple would be drawn up in line with the standard. The standard-bearers would, therefore, be responsible for ensuring that the standards, and therefore the maniples, of each *ordo* (battle-line) were drawn up in line (Speidel 21).

The centuries of the Imperial legion also had another supernumerary officer called a *tesserarius*. He was responsible for passing on the watchword of the day, which was written on a small tablet (*tessera*) from which he derived his name. He was also responsible for selecting small sentry picket and fatigue parties (Webster 117). Polybius (6. 34. 7 sq.) describes the way in which the watchword was circulated throughout the army, from the tent of the tribune, via the tenth maniple of each type of infantry, and so up through each maniple and back to the tribune's tent again. The man who was selected for this duty attended the tribune's tent each sunset (6. 34. 8). Presumably Polybius is describing a permanent appointment; in which case the rank of *tesserarius* existed as early as the 2nd century BC.

The Imperial century also had a *custos armorum* who was in charge of the weapons and equipment and who may also have been included among the *principales* (Breeze 267), though there is no evidence for the existence of this rank during the Republican period. This 'quartermaster-sergeant' or 'staff-sergeant' may well have been termed *hypéretés* in Greek, but the rank is not alluded to in this form in any of the Greek sources dealing with the army. Polybius (11. 22. 4) mentions that Publius Scipio, as soon as it was light, sent a message to the tribunes by his *hypéretai*. These *hypéretai* would seem to be the *beneficiarii*, who served as orderlies to the senior officers of the legion in Imperial times (Webster 118). Vegetius (2. 7) also mentions various types of trumpeter among the supernumeraries of the century of the Imperial army, and it is probable that the Republican maniple would have had its trumpeter too.

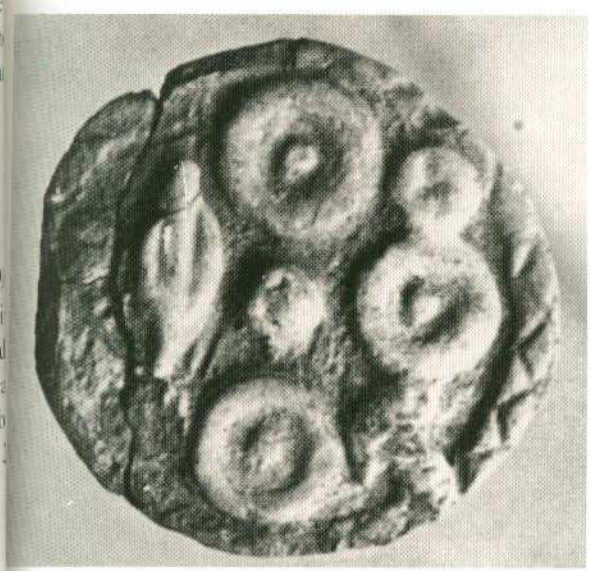
Sealing taken from Roman Republican gem from Barcelona (Antike Gemmen in Deutschen Sammlungen I, 2 no. 1670), showing a Roman horseman riding down an infantryman, probably Roman, either a **veles**, *or perhaps an* **antesignanus**, *equipped with the lighter equipment sometimes given to these troops when operating with cavalry. (Photo: Münchner Staatliche Münzsammlungen)*

TACTICS

Manipular tactics are described by Livy (8. 8. 13). The maniples would normally be drawn up in three lines: *triarii* at the back; *principes* in the middle; and *hastati* at the front. This formation was known as the *triplex acies*, a term mentioned by Caesar (*Bell. Civ.* 1. 41. 2; *Bell. Gall.* 1. 24.

Bell. Afr. 60. 3). At Pharsalus, Caesar (*Bell. Civ.* 3. 89. 3) took cohorts out of his third line and constructed a fourth as a protection against the superior Pompeian cavalry. Crassus is mentioned as adopting a *duplex acies* in Aquitania (*Bell. Gall.* 3. 24. 1), and Caesar once had to draw up his army in *simplex acies* on account of the small number of troops available to him (*Bell. Afr.* 13. 2).

The maniples were not drawn up fighting 'shoulder to shoulder', but each maniple was bordered on either side by a space equal to that occupied by the maniple itself. The line of *principes* was staggered; their maniples were drawn up behind the spaces separating the maniples of the *hastati*, while the maniples of the *triarii* at the back were drawn up in line with the *hastati*. Spaces were also left between the three *ordines*. This 'chequerboard' formation, called *quincunx* by modern scholars, was the normal formation adopted by the maniples. At the Battle of Cannae, however, Varro abandoned the normal manipular formation; instead the maniples were drawn up in much closer order, and the battle-line as a whole was drawn up much more deeply than usual (Polyb. 3. 113. 3; cf. Livy 22. 47. 5). Nevertheless the *quincunx* formation, or variations on it, remained standard.



Pergamene terracotta representing a tray of temple offerings. Bossed temple cakes (popana) are shown, together with a pigeon, or some game bird. We might call Roman cavalry shields of this shape the 'popanum' type. (Photo after Töpperwien no. 598)

The 'popanum' shield seems to have staged a 'comeback' in the later years of the Republic. This Augustan funerary monument of an Italian settled in Thessalonike (Inscriptiones Graecae X, 2, 1. 378) shows a horseman dressed in a tunic and fringed cloak. His horse is shown in a 'window' at top right, and a juvenile, either his child or a slave, holds his cavalry **parma** *for him. (Photo: author)*

Each soldier occupied a space six feet square (Polyb. 18. 30. 8), allowing him to throw his *pila* and then wield his sword. We are not sure precisely how the ranks and files of the century were drawn up. Since the *contuburnium* numbered six men many modern scholars have suggested that the maniples of the *hastati* and *principes* were deployed 20 men wide and six deep, the *triarii* 20 wide and three deep (cf. Wheeler 305 n. 9). Each maniple would therefore have a frontage of 40 yards, and the legion 800 yards, allowing for the intervals in the *quincunx* formation. As the 2nd century progressed, the strength of the legion, and therefore of the individual maniples and centuries in it, gradually increased. The *hastati* were the

In 362 a chasm opened up in the Roman Forum. To expiate this evil portent Marcus Curtius rode into the gulf fully armed (Livy 7. 6. 3). This relief depicting the event, an Imperial copy of a Republican original, is in the Palazzo dei Conservatori. Note the 'popanum' shield decorated with a gorgoneion. (Photo: Deutschen Archäologische Instutut, Rome)

first, expanded to 200 per maniple, but the other *ordines* gradually followed. We may assume that the strength of the *contuburnia*, and thus the depth of each of the three ranks, rose accordingly. Thus, at Pharsalus, Pompey, whose legions each numbered 6,000, drew up his army in *triplex acies*, with each rank ten men deep (Frontin., *Strat.* 2. 3. 22).

The greatest exponent of manipular tactics during this period was Scipio Africanus. At the Battle of the Great Plains in Africa in 203 BC, Scipio drew up his army in the normal way (Polyb. 14. 8. 5), placing his maniples of *hastati* in front, behind them the *principes*, and at the back the *triarii*. Having engaged the enemy to the front with his *hastati*, Scipio redeployed the *principes* and *triarii* and attacked the Celtiberians in flank. Scipio thus 'prepares the way for the use of the reserve, as it is now understood' (Scullard 212). The next year, at the Battle of Zama, this time fighting Hannibal himself, Scipio suspected that the Carthaginians were going to use their elephants t charge the legions in the centre of the Rom battle-line, so he drew up his army in a differe variation of the *quincunx*, described by Polyb (15. 9. 7-9). In the front, the maniples of the *ha tati* were drawn up with the usual gaps betwe each maniple. The ranks (*ordines* – here Polyb uses *speirai*) of the maniples of the *principes* a *triarii*, however, were not staggered behind the Instead they were drawn up in line with the ma iple in front. The normal spaces were also l between the three *ordines*. He filled the interv between the front maniples of *hastati* with t *speirai* of *velites*. These harassed the elephants, b then withdrew through the passages opened to t rear, or through the gaps between the thr *ordines*. Instead of disrupting the Roman form tion, the Carthaginian elephants passed harmless through the gaps between the Roman maniples.

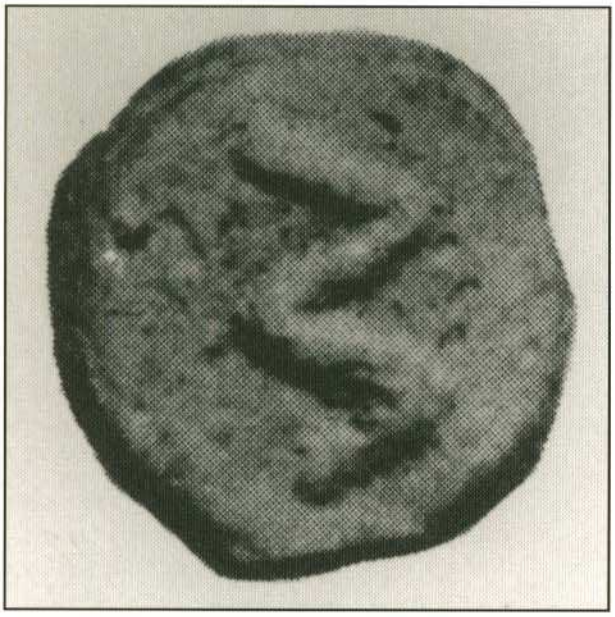
In general, however, the manipular battle was corporal's battle'. Once the manipular lines h been drawn up, there was little chance for t general to intervene. Great reliance was placed the initiative of junior commanders to exert lo control on the battlefield. At the Battle of Pyd a Pelignian officer, one Salvius, distraught by t

inability of his troops to penetrate the Macedonian phalanx, snatched their standard and hurled it into the enemy ranks, encouraging his men to attack with redoubled fury rather than abandon their standard (Plut., *Vit. Aem. Paul.* 20). Hence the junior commanders, and especially the centurions – men with long years of continuous military experience – were considered to be the backbone of the army. One such individual was Spurius Ligustinus, whose military *curriculum vitae* is outlined by Livy (42. 34). He first served in 200 BC, and was promoted to centurion during the war against Philip of Macedon. He subsequently volunteered to serve in Spain as a private soldier, and was promoted to the rank of *centurio prior* of the first maniple of *hastati*. In subsequent campaigns he was appointed centurion *prior* of the first maniple of *principes*, and then was appointed *primus pilus* four times in the space of a few years. By 171 BC, over 50 years old by then, he had served 22 years, had been awarded for bravery 34 times and had received six civic crowns.

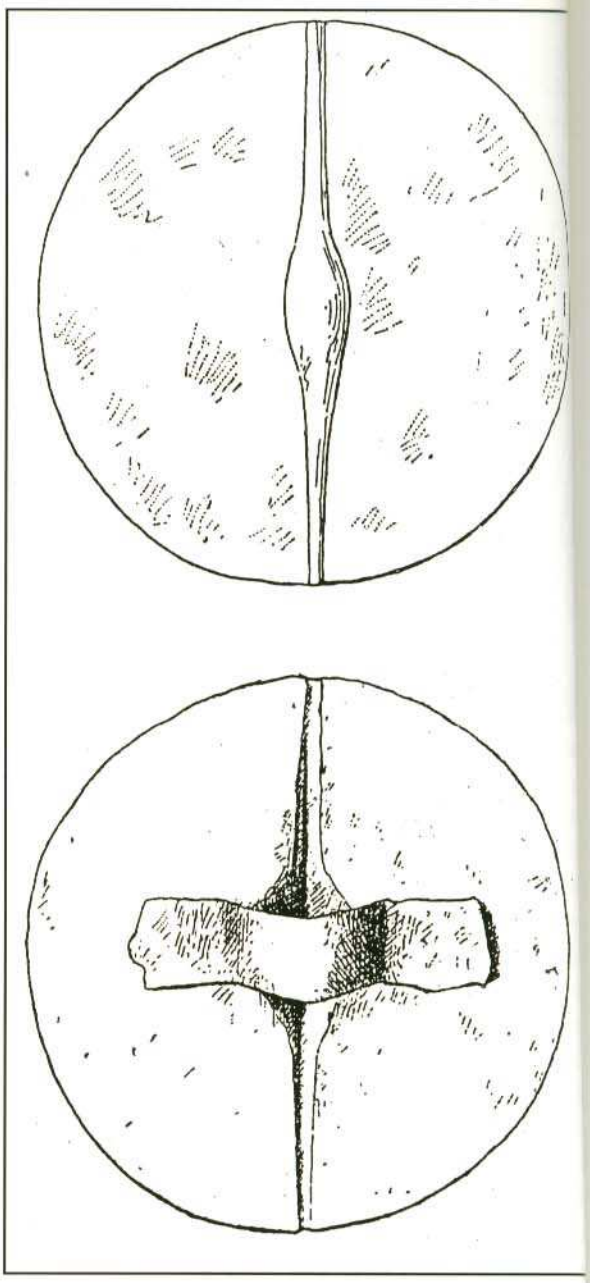
The *velites*

Battle commenced with the 120 *velites* of the cohort, drawn from the youngest and poorest troops (6. 21. 7), skirmishing in front of the 'chequerboard' formation. The role of the *velites* was to drive any enemy light-infantry from the battlefield, and then to attempt to disrupt the enemy battle-line. Prior to combat the *velites* would be stationed within the intervals between the maniples of the *hastati*. In 216 BC , at the Ebro, the Romans drew up their forces against Hasdrubal in *triplex acies*, with part of the *velites* stationed among the *antesignani* and part behind the standards (Livy 23. 29. 3). As light infantry, the *velites* were frequently singled out for special duties. Livy (26. 4. 4) describes how some young *velites* were picked out from all the legions on account of their swiftness of foot. On this occasion the *velites* rode into battle mounted on the hindquarters of the cavalry's horses. When they came into contact with the enemy cavalry, they would leap down

Denarius struck by C. Servilius commemorating some military exploit by one of his ancestors. The 'Greek' cavalry shield with its umbo and spine has replaced the 'pompanum' shield. (Photo: author)



The shield-blazon on the shield of the previous figure is repeated as a coin-device on this **semiuncia** *(worth a twenty-fourth of an* **as***) struck in Republican Rome. It may thus have some significance beyond being merely the initial letter of Servilius' ancestor Marcius. (After Haeberlin pl. 40, 27)*



Right *The handle arrangement at the back of the 'Greek' type of Roman cavalry shield is unknown, but it may perhaps be reflected in this bronze votive miniature from Telamon. (Drawing after Milani 132 fig. 15)*

nimbly and fight on foot. This description from Livy has been held to indicate that the *velites* were created in 211, but it merely refers to the first time the *velites* were mounted. Roman light-armed troops had earlier been called *rorarii*, but during the 2nd century the term *velites* came into general use. The word *velites* occurs for the first time during Livy's account of the defeat of Regulus in 255 BC (1. 33. 9; cf. 2. 30. 1, 6).

Each *veles* carried a sword, javelins, and a round shield or *parma* three feet in diameter. Varro (*Ling.* 5. 115) tells us that the *parma* was so-called because from the centre it was even (*par*) in all directions. The javelin measured about 90–120 cm, with a 22.5 cm head, and was 2.5 cm thick. Examples of light javelin heads of this type have also been recovered from the Roman camps around Numantia (Connolly 131). Each man carried either seven (Livy 26. 4. 4) or five (Lucilius 7. 22) javelins. Livy (38. 21. 13) adds that, if compelled to fight hand-to-hand, the *velite* would transfer his javelins to his left hand and draw h Spanish sword.

Polybius doesn't tell us that the 120 *velit* attached to each cohort were organised into the own maniple. Rather he says that they were di tributed equally among the *meré* (6. 25. 3). H previously used the term *meros* for the legion, bu then uses it of the maniple. He then goes on t say (6. 24. 5) that they call each *meros* (i.e. sub division?), *tagma* (legion?), *speira* (cohort) an

sēmaia (maniple). I don't understand what Polybius means. Most scholars have suggested that the *velites* were distributed among the other maniples in equal proportion (Connolly 129–130; Keppie 35 'for administrative purposes'). Certainly Livy (8. 8. 5) has the light-infantry distributed among the maniples when he describes the organization of the army during the Latin War (340–338). In combat, however, the *velites* would have nothing to do with the other maniples, for they opened battle by harassing the enemy, and then withdrew through the line of battle to form up once again, normally, behind the *triarii*. At the Battle of Ilipa, fought against the Carthaginians in Spain, in 206, Publius Scipio withdrew his *velites* through the intervals between his maniples but then redeployed them on the wings (Polyb. 11. 22. 10).

The *hastati*

When they had done what they could, the *velites* would withdraw through the gaps between the rearward maniples and leave the battlefield to the *hastati*. The *hastati* would throw their two *pila*, draw their swords, and then charge the enemy (cf. Caes., *Bell. Gall.* 1. 25. 2). The *hastati* were drawn from conscripts who were younger, and so presumably also poorer, than the *principes* or *triarii* (6. 21. 7) and may, therefore, have been less heavily armoured than the other two *ordines*. This seems to be reflected in the different tactical roles sometimes given to the *hastati*. At the Battle of Zama, following the defeat of the second rank of the Carthaginian army, when Scipio wished to reform the line to attack the third rank, the *hastati* had to be recalled by trumpet as they were still pursuing the enemy (Polyb. 15. 14. 3).

The name *hastati* has caused some difficulties, for it literally means 'the *hasta*-men'. According to Polybius, however, they carried *pila*, and only the rear-rank men of the *triarii* carried *hastae*. Furthermore, troops fighting in the front rank might be thought of as being the last troops to be equipped with long spears rather than javelins. Consequently a number of complicated theories have been developed by modern scholars to explain this paradox. One would have the *ordines* of the legion originally fighting in a different order, with the *hastati* at the back. These theories are unnecessary, however, for, as Rawson (26) has pointed out, the earliest use of the word *hasta*, by Ennius (239–169) in his *Annales* (Skutch 446 frg.

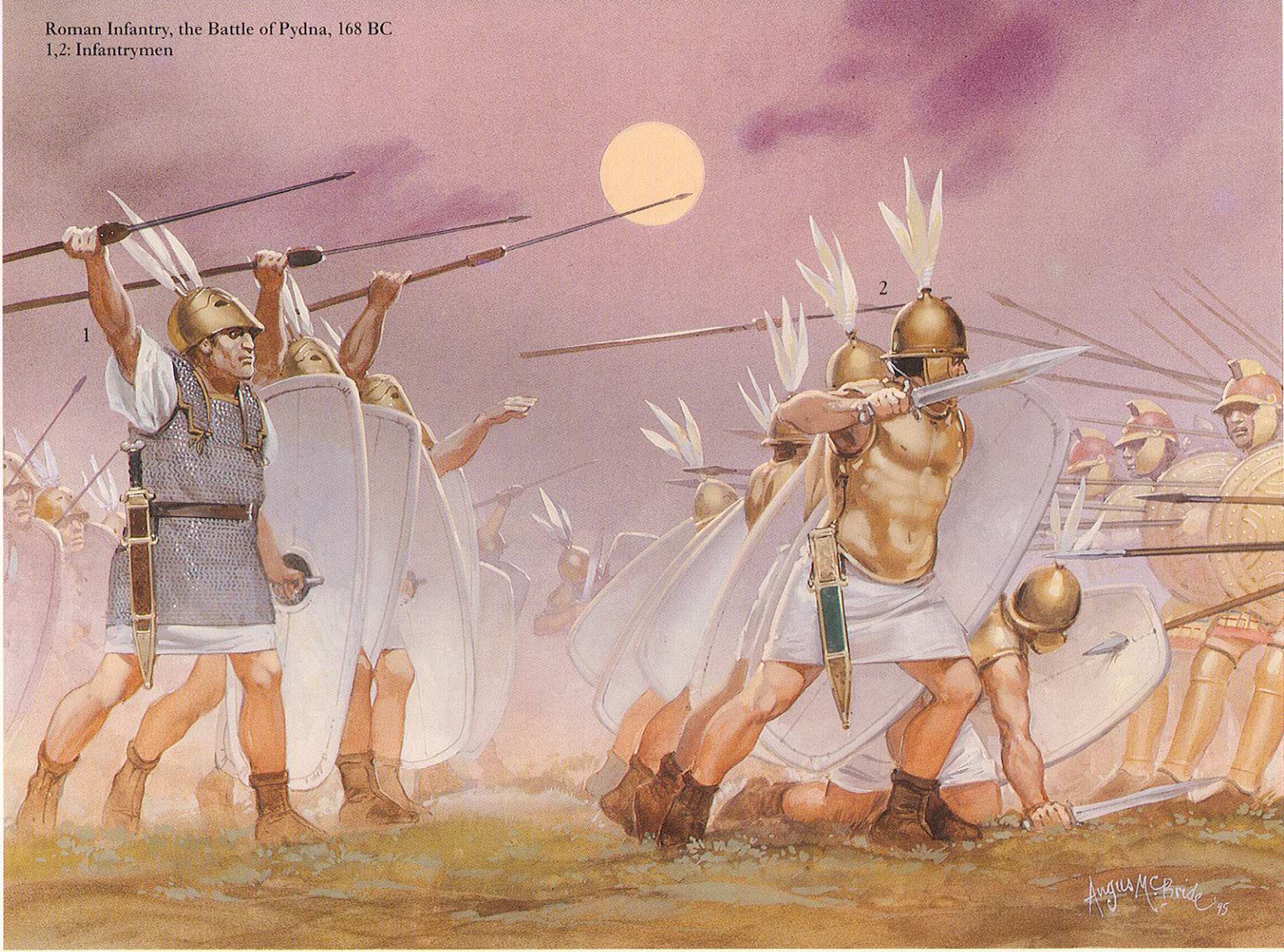
In the late 15th century Maurice of Nassau attempted to recreate the Roman legionary from the descriptions of Livy and Polybius. The sword and target man carried a much larger shield than the sword and buckler man, and fought with a closed helmet and single greave on the leading left leg. (Photo: Mars his feild *or* The Exercise of Arms *(1625); second part entitled* The Perfect Manner of Handling the Sword and Target Set forth in lively figures with the words of Command and Breife Instructions correspondent to every Posture. *British Library)*

Reliefs from Dyrrhachion in Illyria. The gladiator on the right adopts the 'gladiator stance'; the leading leg thrust forward under the shield. The one on the left lunges forward with a rather dramatic sword-thrust: fighting left-handed, like the Emperor Commodus (Dio Cass. 72. 19), he is protected from head to toe by his enclosed helmet, **scutum** *and single greave. Note also the square* **pectorale** *decorated with a* **gorgoncion**, *the* **subligaculum** *(loin-cloth) with its armoured belt extended to protect the groin, the gauntlet (***manica***) and thong bindings on the arm. (After Heuzey & Daumet 383, pl. xxx)*

266), describes a throwing spear. Early Latin terms for throwing spears were not, it seems, clearly differentiated. Consequently Rawson has suggested that in the early 3rd century only the *hastati* of the first line were armed with throwing-spears – called *hastae velitares* – while the two back lines were armed with the long spears that were later called *hastae longae*. This suggestion is seemingly confirmed by Dionysius of Halicarnassus (20. 11. 2), who informs us that during the Pyrrhic War, probably the Battle of Beneventum in 275, those troops whom the Romans call *principes* fought in close order with 'cavalry spears' held in both hands. And Plutarch's account of the Battle of Asculum in 279 (*Vit. Pyrrh.* 21. 6), presumably drawn from a contemporary source, has the Romans fighting with swords against the *sarisai* of the Epirote phalanx. It seems, then, that the front ranks of the Roman Army were already using the *pilum* and sword as early as 279. Polybius (1. 40. 12) also mentions javelins, presumably *pila*, in use at the Battle of Panormus in 250.

Roman Legionaries, Spain,
Second Punic War, 218-201 BC
1: Hastatus
2: Triarius
3: Veles
1
2
3
Angus McBride

Cavalry, Thessaly, Second Macedonian War, 200-197 BC
1,2: Cavalrymen
3: Veles
1
2
3
Angus McBride '95


Roman Infantry, the Battle of Pydna, 168 BC
1,2: Infantrymen
1
2
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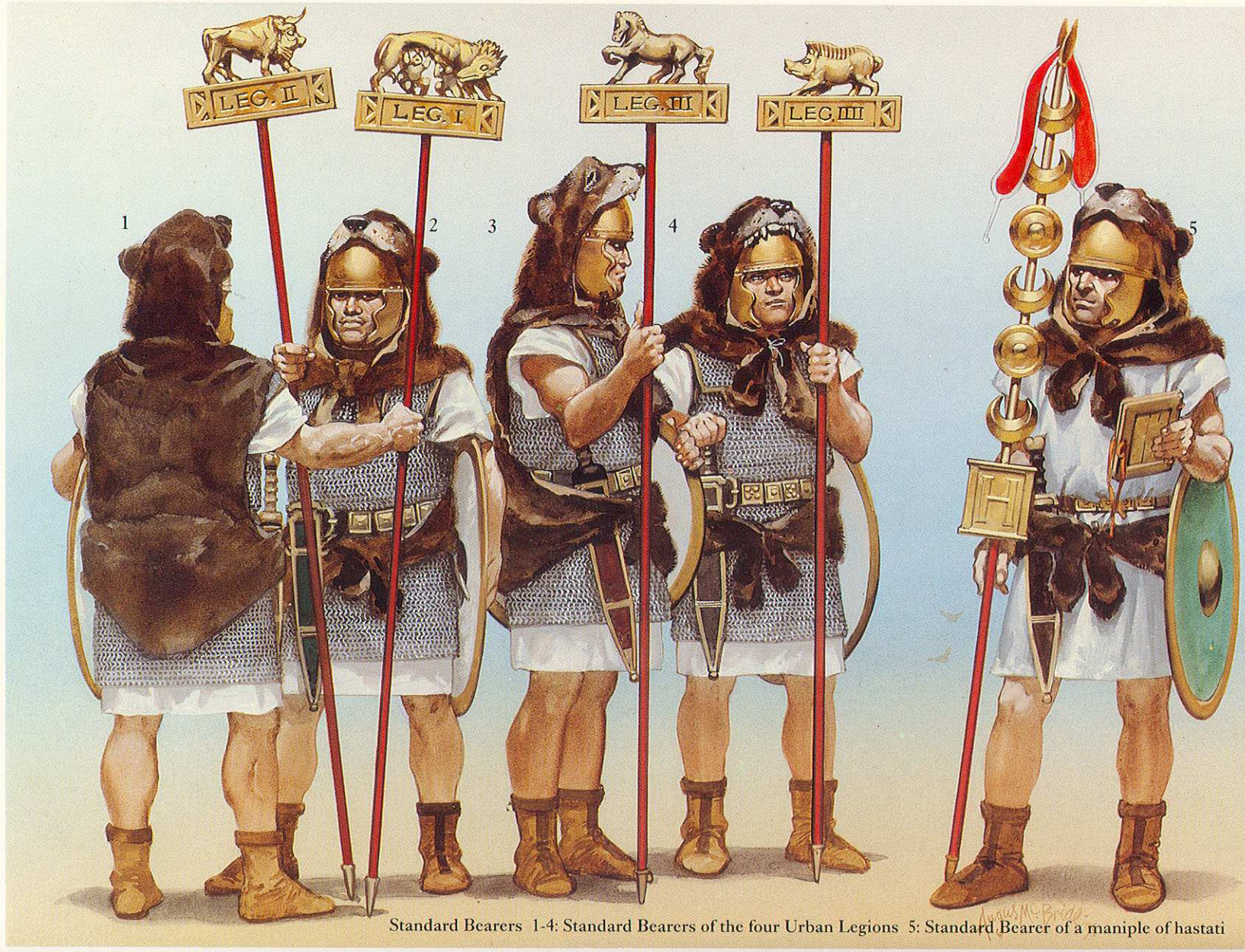

Standard Bearers 1-4: Standard Bearers of the four Urban Legions 5: Standard Bearer of a maniple of hastati

Mounted General in Wartime
1: General
2: Lictor
3,4: Scribes
1
2
3,4
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Antesignani in combat with
Acheaen Cavalry, Acheaen War, 146 BC
1,3: Antesignani
2: Acheaen League Cavalryman
1
2
3
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The Army towards the end of the period
1: Tribune
2: Eques
3,4: Infantry
1
2
3
4
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The Army during the Jugurthine War, 110-105 BC
1: Centurion
2: Legionary
3: Cavalry Officer
3
2
1
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Normally there were 1,200 *hastati* per legion (Polyb. 6. 21. 9), but according to Livy (33. 1. 2), Flamininus had 2,000 *hastati* in his legions in 197: thus 200 in each maniple rather than the normal 120. Flamininus' legions would therefore have had a total strength of 5,000 infantry. Flamininus used his *hastati*, travelling rapidly under cover, to frighten the ambassadors of the Boeotian League to come over to the Roman side. This was, again, a tactical situation suitable for less heavily armoured troops.

The *antesignani*

Livy (22. 5. 7) mentions that at the Battle of Lake Trasimene, in their confusion the Romans no longer fought in their lines of *principes*, *hastati* and *triarii*; nor did the ranks of the *antesignani* fight in front of the standards, with the rest brought up behind their standards; nor did they fight in their legion, cohort or maniple. We may conclude that the maniples of the *hastati*, fighting in front of the legion, were drawn up in front of their standards, while the maniples of the *principes* and *triarii* were drawn up behind their standards. For this reason, the *hastati* (and, presumably, the *velites* when they were still attached to the legionary cohorts) were also known as *antesignani*. Livy could be using the term *antesignani* anachronistically during his description of the Battle of Lake Trasimene, but the term seemingly goes back at least till 86 BC, for at the Battle of Chaironeia, Sulla deployed his army in *triplex acies*, leaving intervals through which to advance or withdraw his cavalry and light troops. The *postsignani*, who were in the second line, then fixed a line of stakes into the ground, and the line of *antesignani* were withdrawn through these stakes (Frontinus, *Strat.* 2. 3. 17).

After the Marian reforms, the *hastati*, though mostly fighting as regular infantry within the ranks, continued to play a specialist role as light infantry when the battlefield situation demanded. To some degree the absence of any light infantry within the legion in the post-Marian army (*velites* were no longer included in the legionary organization) placed increased burdens upon the *hastati*. This speculation can be supported by four passages illustrating Caesar's tactical improvisations during the civil war.

Relief from the Torre de San Magin, from the oldest stretch of city wall of Tarragona in Spain, probably 'Scipionic', erected by the Roman army during the last years of the 3rd century BC. The publisher (Grünhagen) explained the wolf-head badge on the umbo of the legionary shield held by Minerva as a native Spanish blazon of the god of war. (Photo: Deutschen Archäologische Instituts, Madrid)

At the Battle of Ilerda in 49, Caesar (*BC* 1. 43) ordered *antesignani* to run out and capture an eminence of tactical importance on the plain in front of the town. We can assume that the *antesignani* were normally drawn up in the front ranks of the legion: the usual position of the *hastati* in fact. This initial skirmish was unsuccessful: more than 600 were wounded and 70 died, including Q. Fulginius, a centurion of the *hastati* of the first cohort of the XIV Legion. Somewhat later in the campaign Caesar (*BC* 1.57) detached 'the strongest men drawn from all the legions, *antesignani* and centurions' and gave them to Brutus to man a fleet against the Massilians.

The next year, in an engagement during the Dyrrachium campaign, 400 *antesignani* fought with great success mixed up with the cavalry (*BC* 3.75).

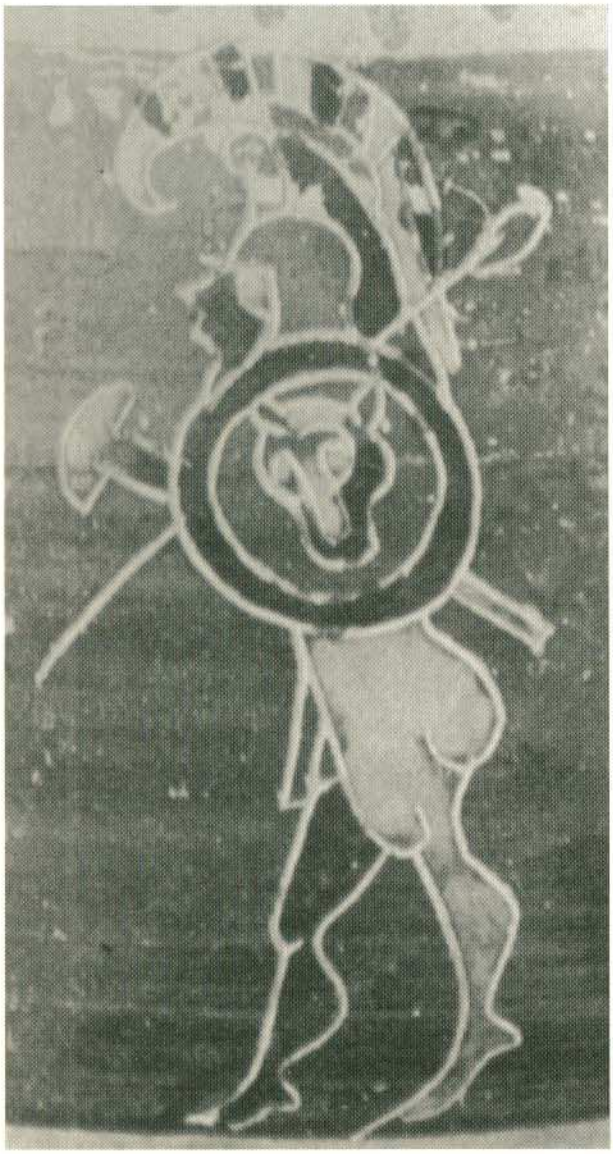
After Caesar's move into Thessaly, in view of the fact that his cavalry was far inferior to Pompey's, Caesar reinforced it with lightly-

equipped young men drawn from the *antesignani* with arms selected for swiftness (*BC* 3. 84). Caesar had first developed these tactics fighting against the Germans under Ariovistus. He tells us (*Bell. Gall.* 1. 48) that the Germans trained infantrymen, as swift as they were brave, to fight with the cavalry, holding on to the manes of the horses. They would gather round any cavalryman who had been wounded, and could form a base upon which the horsemen could retire.

Putting this information together, it seems that during the civil wars, the *antesignani* – 'troops who fight before the standards' – were drawn from the younger men of the *hastati*. The two terms seemingly became interchangeable. The *antesignani* were frequently given lighter equipment than the rest of the legionaries, in order to carry out their task. The growth in the use of *hastati* as light infantry presumably coincided with the demise of the *velites* as an integral component of the legionary cohort.

In 107 the Roman general Marius had found himself unable to take the treasury of King Jugurtha, situated on top of a rocky hill not far from the River Muluccha. A Ligurian auxiliary found a path to the top of the rock while out gathering snails. Marius gave him five of the most agile of his trumpeters and buglers and four centurions, presumably along with their centuries. We are told (Sall. *Iug.* 94. 1) that the soldiers bared their heads and feet so as to be able to see better and climb more easily. They carried their swords and their shields on their backs, but took Numidian hide shields instead of their legionary ones, for they were lighter and made less noise when struck. These men were probably *antesignani*, and the passage illustrates how normal legionary equipment could be modified or abandoned according to the tactical demands of a situation.

The *antesignani* continued into the Imperial period. Inscriptions record that sets of equipment were held in store for them (Speidel 14). However, what these sets consisted of is not specified in any detail. According to Vegetius (2. 16), the *antesignani* used smaller or lighter armour than the other legionaries. Thus it seems that in the 2nd century BC the *hastati* would frequently wear less body-armour than the other ranks of the legion. Perhaps many wore no cuirass at all: Scipio led his legions out of camp on the five-day march preceding the Battle of the Great Plains in 203 'entirely in light order'. Polybius (14. 8. 1) might mean that Scipio ordered his legionaries to leave all their heavy baggage in camp, but more probably that they left some of their armour behind and wore a 'slimmed down' version of the legionary panoply.



The wolf-head badge is also found in early Italian iconographic sources. Here it appears as a shield-blazon on an Etruscan olpe *in the Villa Giulia Museum dating to the first half of the 6th century. (Photo: Sopr. Arch. Etruria Méridionale)*

This statue probably represents the usurper L. Domitius Alexander dressed as the Roman god Silvanus with the lion skin of Hercules. Though dating to circa AD 310 it may demonstrate the original style of wearing an animal pelt over clothing adopted in early Rome: that is with both sets of paws tied at hip as well as at shoulder, a feature adopted in Plate D. (After von Heintze pl. 136)

The *principes*

If the *hastati* were unable to achieve victory, they would withdraw through the gaps in the maniples and re-form behind the *triarii*. The *principes*, in turn, would now throw their pair of *pila* (6. 23. 8), draw their swords, and charge the enemy. The 1,200 *principes* (6. 21. 9) were formed from men in the prime of life (6. 21. 7) with sufficient funds to provide themselves with body-armour. Consequently the order of the *principes* and *hastati* was sometimes reversed, presumably to avoid casualties among the lighter-armed *hastati*. In 181, during a campaign against the Ligurians, Lucius Aemilius placed the *principes* in the first line with the *hastati* in the second (Livy 40. 27. 6). As mentioned above, the *principes* still carried the *hasta longa* during the Pyrrhic Wars. At some point in the middle of the 3rd century they exchanged their *hastae* for *pila*.

The *triarii*

If the *principes* withdrew, the fighting came to the last line. The 600 *triarii* were composed of the oldest men (6. 21. 7, 9). Presumably the *triarii* were sufficiently wealthy to provide themselves with the mail cuirass. Under normal circumstances the *triarii* were kept in reserve, even if all other elements of the legion were engaged in an all-out attack. Livy (34. 15. 6) mentions how Cato led the *principes* and *hastati* of the second legion in an attack on the left gate of Emporiae in 195. While the *hastati* and *principes* were fighting, the *triarii* would sit, or rather kneel, beneath their standards, with the left leg bent forward, their shields leaning against their shoulders, and their spears thrust forward at an oblique angle (Livy 8. 8. 10; Varro, *Ling.* 5. 89). If formed up in *quincunx*, there would be gaps left in the last line. Livy (8. 8. 12) describes a manoeuvre in which the *triarii* would rise from the kneeling position, extend the frontage of each maniple so as to close the gaps in the line, and finally charge the enemy.

The *triarii* are first mentioned at the Battle of Cape Ecnomus in 256, which was fought between four legions manning the Roman fleet and the Carthaginians (Walbank, *Classical Review* 64 (1950) 10-11). The *triarii* were sometimes also

termed *pilani* (Speidel 21); thus the senior centurion of the legion was called the *primus pilus*. Varro (*Ling.* 5. 89) incorrectly equates *pilani* with *pilum*, and speculates that the *triarii* had first used the *pilum*, and only later adopted the *hasta* as their principal weapon. Rather *pilani* seems derived from *pila*, a 'pillar' or 'column'; the *pilani* were troops stationed at the back of the column. When Polybius wrote (6. 23. 16), the *triarii* carried a single fighting-spear (*hasta longa*) rather than a pair of *pila*. Polybius (2. 33. 4) tells us that when the Roman Army contested the invasion of the Insubres in 223, the tribunes distributed the *hastae* of the *triarii* among the front ranks of the *hastati*. The intention was that their Celtic adversaries would blunt and bend their swords, slashing through the lines of spears in front of the Roman ranks, before coming to grips with the Romans in hand-to-hand fighting. As the 2nd century progressed the *triarii* gradually exchanged their *hastae* for *pila*.

During the Third Macedonian War (171–168 BC) the strength of the legion frequently rose to 6,000 or 6,200. This implies that, as the strength of Flamininus' legions rose to 5,000 when the maniples of the *hastati* were expanded to 200, the maniples of the *principes* and/or *triarii* were expanded later. The strengths of the various *ordines* in a 6,200-strong legion can only be guessed, but if we deduct 1,200 for the *velites*, then the ten maniples of *hastati* and *principes* might have numbered 200 each, and the ten maniples of *triarii* could have numbered 100. Presumably the frontage of 20 was retained for all the maniples; otherwise the *quincunx* formation would not have fitted together, and so the maniples of 200 men would have a depth of ten ranks.

OTHER ARMS

Cavalry

The *equites*, or 'knights', formed the highest echelon of Roman society. Known as *equites equo publico*, their numbers stood at 1,800 and their horses were supplied and maintained by the state. An *eques* might lose his status at an inspection (*recognitio*) through unworthy conduct, because his horse was inadequately cared for, or if found physically unfit for cavalry service. The status of *eques equo publico* became increasingly honorific.

Three hundred cavalry were assigned to each

This denarius, struck in Marseilles by C. Valerius Flaccus while Proconsul in Gaul in 82 (Keppie 67), shows the legionary eagle standard introduced by Marius, flanked by standards marked P for the **principes** *and H for the* **hastati**. *(Photo: Bibliothèque Nationale, Paris)*

Statue from Herculaneum in the National Museum, Naples, showing a member of the Balbus family wearing the military dress of a proconsul or praetor. Though Augustan, the statue probably represents the dress of a military commander of the later Republican period reasonably accurately. (Photo: Deutsches Archäologisches Instututs, Rome)

legion (Polyb. 6. 20. 9) – a total of 1,200 horsemen. If more than four legions were raised, their numbers could be supplemented by citizens supplying their own horses: *equites equis suis merentes* or *equites equo privato*. The organization and

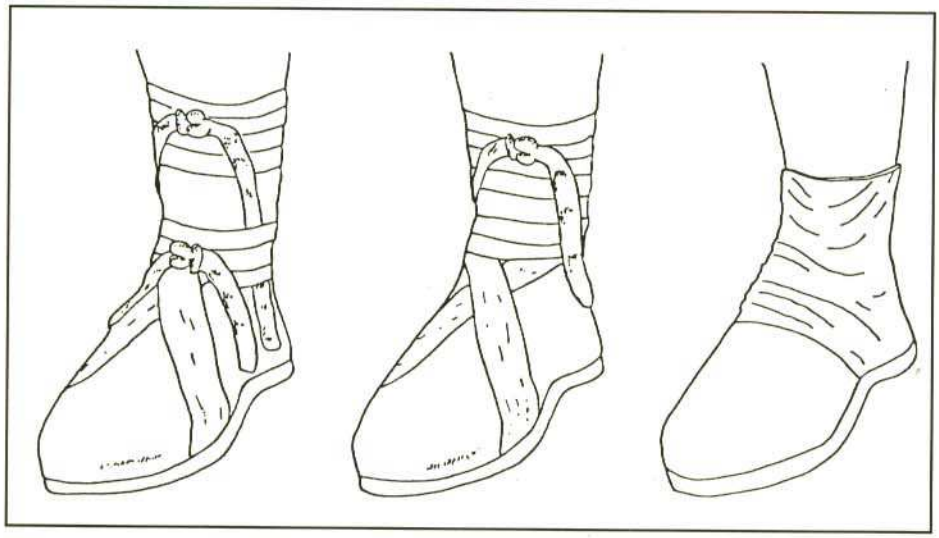
equipment of the legionary cavalry is described in Polybius 6. 25. The cavalry was divided into ten *ilai* (*turmae*) of 30 men, each containing three *decuriones*, one *decurio* commanding the *turma* as a whole. The *decuriones* themselves each appointed an *optio*, though later on the tribunes appointed the *optiones* themselves (Varro, *Ling.* 5. 91). Presumably the *turma* was drawn up in three ranks of ten, each rank having its *decurio* on the right and its *optio* on the left.

Polybius tells us that the Roman cavalry had once been lightly equipped, but were now more heavily armed and wore cuirasses. They had substituted their native weapons for ones borrowed from the Greeks. Their spears had been too slender and pliant to allow them to aim an accurate blow: they had tended to vibrate, and they broke too easily. When they did break, since the spears had no butt-spikes, they couldn't aim a second blow. Consequently the cavalry were now using Greek cavalry-spears.

The shield they had formerly made use of, Polybius (6. 25. 7) tells us, was made of ox-hide, and was similar in shape to the *popanum*, 'the round, bossed cake used in sacrifices'. They were not firm enough to be used effectively in the attack, and once wet, their leather covering tended to peel off. Consequently the Romans started to copy Greek cavalry shields. Polybius probably has in mind the large, round cavalry shields with a central boss and a spine reinforcing the shield. Indeed one can see Roman cavalry using Greek shields of this type on coins of Republican date, but they never supplanted the traditional 'popanum' shield entirely, for these too continue to be shown on coins of Augustus and on funerary monuments of the same date (cf. Bishop & Coulston, frontispiece).

Allied contingents

The Roman Army increasingly relied on allied contingents for its cavalry and light infantry. Each Roman army was usually accompanied by an equal number of allied infantry, but by three times as many cavalry (Polyb. 6. 26. 7). The consuls would appoint 12 prefects to command the allies (*praefecti sociorum*), and of the six appointed to each consular army, three would fight on each wing commanding the allied contingents (cf. Polyb. 6. 34. 3). Many of these allied cohorts may have been equipped in the same way as the Roman legionary cohorts, banded together into tens in an *ala sociorum*, the equivalent of a legion, each commanded by one of the six *praefecti sociorum* appointed by the consuls (Keppie 22). The precise details varied from campaign to campaign. For example, in the mobilization of 171 for the war against Perseus (Livy 42. 35. 4-6) the four urban legions were mobilized and the praetor Gaius Sulpicius Galba chose four military tribunes from the senate as their commanders. As these legions were divided between two consular armies, only two fought at Pydna. The 'Allies of Latin Name' supplied 15,000 infantry and 1,200 cavalry, while



Three types of Roman boot denoting social rank in the Imperial period. Left, the **calceus patricius**, *worn only by patricians; centre, the* **calceus senatorius**, *worn only by members of Senate; right, the* **calceus equester**, *restricted to members of the Equestrian Order. (Drawing after Goette 451 fig. 35b)*

Bronze figurine of a Roman lictor, Augustan in date, in the British Museum. Note the bound fasces, *the equestrian boots, and the full toga worn in times of peace. (Photo: author)*

the Ligurians supplied 2,000 infantry. The Cretans and Numidians also supplied troops, and elephants were attached to the army.

Units of allied light infantry were organized into cohorts along Roman lines. Pompey had two cohorts of 600 slingers in Greece (Caesar, *Bell. Civ.* 3. 4. 3). Cohorts of allied light infantry increasingly supplemented or replaced the legionary *velites* in the later 2nd century. As the size of armies increased, so did the demand for citizen manpower. It is generally accepted that the Roman military machine was beginning to run out of available manpower by the end of the 2nd century, though this view has been challenged (Evans 20; Rich). It became increasingly difficult to find sufficient citizen manpower from the *adsidui* alone to fill the three *ordines*. Indeed, in 107 Marius was forced to extend recruitment to the *proletarii*. The probable result of all this was that fewer and fewer citizens were available to serve as *velites*.

There was probably a second, tactical, reason for the demise of the *velites*. The conquest of the western Mediterranean, and particularly of Spain, involved the Romans in irregular combat with various tribal enemies, who could field formidably efficient light infantry. Against these troops the *velites* were often ineffective, and demand increased for more efficient missile troops with better weapons who could keep the enemy at a distance (Bell 419).

In 133 at Numantia, Scipio Aemilianus deployed archers and slingers interspersed not only with his cohorts, but even with his centuries (Front. 4. 7. 27). These troops may have been the archers and slingers brought over by Jugurtha with 12 elephants in the winter of 134 (Bell 419 n. 106).

In 109 Metellus adopted a similar expedient at the Battle of Muthul during the Jugurthine War, dispersing archers and slingers between the maniples of his line (Sallust, *BJ* 49. 6). Bell (416) noted that two of the *legati* of Metellus, Marius and P. Rutilius Rufus, had served under Scipio in the Numantine War, and it is probable that these two individuals were instrumental in spreading the new tactical ideas.

The practice of interspersing missile troops among the legionary cohorts continued into the 1st century. During his campaign against the Parthians, Antony arranged for his javelinmen and slingers to sally out through the lines of his legionaries (Plut., *Vit. Ant.* 41. 4-5). Light-armed troops could also be dispersed among the cavalry (Caes., *Bell. Afr.* 60).

The traditional view is that the legions were deprived of their *velites* by the Marian reforms. Bell (421-2) has pointed out that although *velites* had wholly disappeared by the time of Caesar, the term does occur sporadically in sources from the earlier part of the 1st century. For example, Frontinus (*Strat.* 2. 3. 17), in describing Sulla's dispositions at Orchomenos, mentions how the *velites* and light-armed troops discharged their javelins at the oncoming Pontic chariotry. Bell suggests that Lucullus, who made little use of light troops, may have been more responsible than anyone else for the demise of the legionary *velites*. Perhaps, though, we should not assume that our sources are using the term *velites* in the restricted meaning of legionary *velites*, but rather to describe allied cohorts equipped in the same way as the legionary *velites*.

Sallust (*BJ* 105. 2) describes how Marius sent Sulla to meet the Mauritanean King Bocchus with a guard of horsemen, Balearic slingers, archers, and a cohort of Paelignians *'cum velitaribus armis'*. Thus the term may have lingered on after the disestablishment of the legionary *velites*. In the groundplan of Camp III at Reneiblas near Numantia in Spain (Keppie 46-7), which is thought to have been constructed by Q. Fulvius Nobilior in 153/2, there is no room for any *velites* in the accepted reconstruction.

THE ROMAN LEGION IN BATTLE

The Roman Republican army was principally an infantry army. Roman commanders were, however, keenly aware of the value of cavalry. In 184 Cato held the office of censor at Rome, together with one Valerius, and attempted to rid the *equites* of all unfit to serve; presumably to restore the mili-

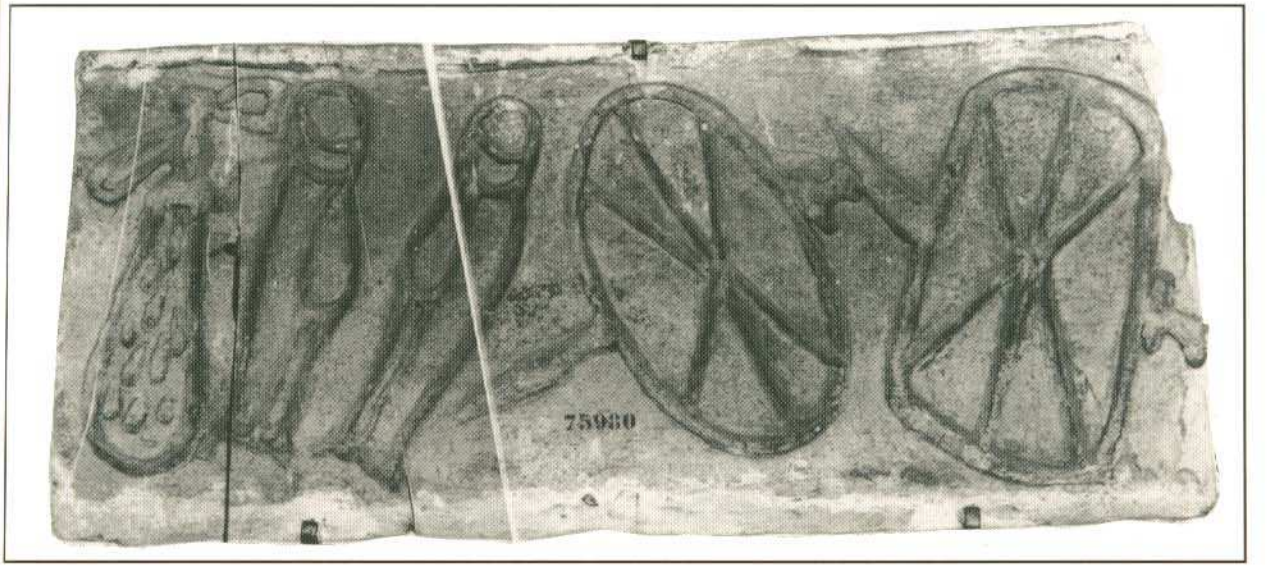
tary utility of the institution. It was probably at this time too that Cato attempted to persuade the Senate to raise the size of the *equites* from 1,800 to 2,200 (Astin 81-2). Cato's efforts seem to have been unsuccessful, for the last references to Roman Republican citizen cavalry (for which I thank B. Rankov) concern the Battle of Vercellae in 102, when the younger M. Aemilius Scaurus retreated from before the Cimbri whilst serving as an *eques* (Valerius Maximus 5. 8. 4; Frontinus, *Strat.* 4. 1. 13). Subsequently the Republican Army seemingly relied exclusively on allied cavalry.

Campania was particularly important for both recruits and remounts. Following the Battle of Cannae, the Romans were concerned to retain control of Campania, capable of supplying 4,000 cavalry (Livy 23. 5. 15). Lucilius, who served in the cavalry under Scipio during the Numantine War in 134/3, mentions Campanian horses in a fragmentary passage drawn from his *Satires* (506-8).

Rome frequently enjoyed a considerable superiority in cavalry during her battles with Macedonian and Greek armies, and this was a principal factor in her victories. Under Philip and Alexander, the Macedonian state had been capable of raising large numbers of cavalry, principally because of the 'Companion' system, deliberately supported by land-grants and by other devices, which extended the potential pool of propertied horse-owning cavalry recruits. Subsequent social change in Macedonia, coupled with lack of state finances, served to diminish the numbers of cavalry available for recruitment by the state. During their wars with the Romans, the Macedonians were rarely able to raise more than a few hundred horsemen. Consequently the Macedonians came to rely more and more on their phalanx to achieve victory, but they rarely had sufficient cavalry available to secure its flanks.

We may compare the success of the Roman swordsmen against the phalanx to the success of the Biscayan sword-and-buckler men in Spanish service over the Swiss pikemen of Louis XII at the Battle of Cerignola in 1503. Contemporary military pundits, however, while directly comparing the sword-and-buckler men to the Roman legionaries and advocating their use, recognised that in the open field they could not stand against cavalry. Had the Macedonians of the 2nd century possessed an effective cavalry arm to protect the flanks of their phalanx and to attack the legions, the battles of the Macedonian Wars may have turned out very differently. Thus, at the Battle of Magnesia, Antiochus the Great managed to break through the lines of the left-hand Roman legion with his cavalry *agéma* and cataphracts (Bar-Kochva 170; cf. Briscoe 355).

Terracotta sarcophagus, dated to the first quarter of the 1st century (Vacano 1960) showing a club, greaves, and shields decorated with geometric shield-devices. (Photo: Museo Archeologico, Florence)



Another significant factor in Rome's victories was the brutality of her soldiery. This feature might be explained as arising from the constant wars in which Rome became involved during this period, but these wars only served to exacerbate an already deeply rooted predisposition towards violence. The institutionalization of violence, even in the gladiatorial pastimes of Roman society, fostered a thirst for violence in all forms of social activity, and more particularly a lust for war. Brutality and massacre were hallmarks of Roman methods of warfare, and the capture of a Greek city was normally followed by mass rape and massacre from which even the dogs were not spared (Harris 51-3, 263-4). The prospect of rape, violence and plunder in a foreign country have always been potent weapons in the armoury of the recruiting sergeant. In the militarized society of Republican Rome the blandishments of sex and violence abroad helped greatly in diverting the attention of the poor from the appalling social injustices of the Roman political system. Thus love of violence was not simply an unsavoury excrescence of the Roman social system, it was the gel which held it together. This brutality tended to paralyze the capacity of Rome's enemies to resist her effectively.

Perhaps the most important factor in Roman success was, however, her superiority in manpower. When Hannibal invaded Italy with less than 20,000 men, Polybius (2. 24. 16) tells us that the Romans and their allies were capable of mustering, at least on paper, 700,000 foot and 70,000 horse (cf. Brunt). It was Rome's capability to mobilize such huge armies which defeated Macedon, rather than any innate superiority of the Roman military system. No matter how many armies the incompetence of Roman military commanders might lose, there was always a near-inexhaustible reservoir of manpower to draw on. The first years of the Third Macedonian War saw many Roman reverses, but these didn't matter; all that mattered was the last battle.

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Limestone base from an honorific monument erected for Sextus Appuleius, consul in 29 (Diebner Is. 28). Note the 1st century infantry shield, dateable by its 'excised' top and bottom, decorated with a geometric pattern, and a 'popanum' shield decorated with a lion's head. (Photo: Deutschen Archäologische Instututs, Rome)

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THE PLATES

A: Roman legionaries, Spain, Second Punic War
Roman legionaries in Spain during the closing stages of the Second Punic War. The oblong shield shown on the sculpture of Minerva from Tarragona has been used for the *hastatus* (**A1**) and the *triarius* (**A2**). The head of a she-wolf shown in the relief may be a Roman legionary blazon. The *hastatus* wears a *pectorale*, decorated with stylised musculature as was the earlier practice, while the *triarius* wears a mail cuirass, here secured at the chest with a clasp, in the Celtic fashion, rather than by shoulder guards. The single greaves worn by both figures are based on the figurine once in the Collection Gréau. Polybius (6. 22) informs us that the *velites* (**A3**) wore 'a simple helmet', which they sometimes covered with the skin of a wolf or some other animal. He does not tell us the *velites* wore a complete wolf-skin. The 'simple' helmet worn by **A2** is of the Italo-Corinthian type. The javelins follow the reconstructions of Connolly (131), which are based on surviving 2nd-century examples.

We have no information on the appearance of the Spanish sword, scabbard or sword-belt, nor of the style of boot worn by Roman legionaries during this period, so relevant details in the reconstructions throughout this book are speculative. Tunics of a natural off-white colour, as worn during the Imperial period (Fuentes), have been restored.

B: Cavalry, Thessaly, Second Macedonian War
Two cavalrymen on reconnaisance in Thessaly during the Second Macedonian War, gathering information from a *veles*. **B1**, based on the Curtius relief, carries a shield of the 'popanum' variety. **B2**, based on the Servilius coin, carries a 'Greek' shield with a central spine. Both figures wear the cavalry cloak (*sagum*), which is known to have been a heavy cloak of very dark, practically black colour; presumably made of extremely dark brown natural wool, and often worn as mourning dress (Wilson 105). Plutarch (*Vit. Crass.* 23. 1) tells us that Crassus put on a black cloak instead of his general's red cloak on the eve of the Battle of Carrhae in 53; this act was interpreted as a bad omen by the troops. Presumably Crassus had put on the cloak he had worn previously as a cavalry officer.

The tunics have been restored as bleached white, with a narrow purple stripe running down from both shoulders to the hem – a distinction which seems to have been limited to the *equites* during the Republican period. All other colours in the plate are arbitrary. **B2** wears boots of the style which later became standard dress for the equestrian order, while **B1** wears boots related to the later type which denoted members of the senator-

Opposite *Detail of a 1st century Etruscan cinerary urn from Volterra (Bandinelli fig. 372). Note the boots, precursors to the later 'senatorial' type, and the ornamental spearhead: both most probably insignia of rank. (Photo: Museo Guarnacci)*

ial order. The horse furniture is decorated with silver *phalerae*, which Livy (22. 52. 5) mentions being captured in large numbers by Hannibal after the Battle of Cannae.

B3 uses the same equipment as **A3**. The custom of wearing the mask of an animal over the helmet was seemingly derived from hunting practice, for Grattius (*Cynegeticon* 340) mentions hunters' caps made from badger. Thus the mask of a badger has been restored. The shield design is based on a sculpture from the Basilica Aemilia (Kränzle p. 120), but the colours used are arbitrary.

C: Roman Infantry, the Battle of Pydna, 170BC

Roman infantrymen, based on the Aemilius Paulus Monument at Delphi, versus the Macedonian Chalcaspides regiment at the Battle of Pydna. Greaves have been entirely abandoned. Some figures wear the familiar mail cuirass, but others wear the Italian muscle-cuirass, which can be recognized by its lack of shoulder-guards. **C1** has been restored with a helmet of Italo-Corinthian type, possibly suggested by one damaged head on the monument, while **C2** has been restored with the more familiar Montefortino type.

D: Standard Bearers of the four Urban Legions

Pliny (*HN* 10. 5. 16) tells us that Marius gave the Roman legions their eagle standards during his second consulship in 104. Prior to that the eagle had been their first badge along with four others: the wolf, the minotaur, the horse and the boar, which went before the different ranks (*ordines*). It is possible to suppose Pliny is referring to the *ordines* of the *triarii*, *principes*, and *hastati*, but four standards does not divide easily into three *ordines*. Thus it seems preferable to assume that the four additional legionary badges mentioned by Pliny belonged to the original four urban legions. **D1-D4** show the standard-bearers of the four urban legions standing in front of the walls of an Italian sanctuary precinct. Over their mail cuirasses they wear bearskins, and at their belts they suspend *parmae* which are similar to those used by the *velites*. **D5** shows a standard-bearer of a maniple of *hastati*, consequently he is not wearing body-armour.

E: A General in Wartime

E1, based on the statue of Balbus, represents a mounted general of senatorial rank. During this period consuls would frequently command armies. In peacetime consuls would wear a white toga and tunic decorated with purple stripes and white boots (Lydus, *de magistr.* 1. 32. 1); in times of war the toga was laid aside for the military cloak (*paludamentum*). Pliny (*HN* 22. 3. 3) mentions that the scarlet dye of the 'coccum' was reserved to colour the *paludamenta* of generals. This is confirmed by Silius Italicus (4. 518, 17.395-8), who mentions Roman generals dressed in scarlet with scarlet cloaks, although other sources mention purple (Caes., *Bell. Afr.* 57; Appian, *Pun.* 66) or crimson (Plut., *Vit. Crass.* 23. 1) cloaks. Literary sources mention consuls and other senators wearing the 'senatorial' or 'patrician' boot coloured either black or scarlet, while further texts mention the black thongs which bound the boot up (Talbert 219). We may presume that the boot itself was scarlet, but with black. The sole of the boot has been restored as black thongs. His horse has scarlet horse furniture decorated with gold *phalerae*, which were insignia normally awarded only to military commanders, including consuls (Bloch p. 108).

E2: Before the general marches one of his 12 lictors. The *fasces* were a bundle of rods and an axe, symbolizing the magistrate's ability to inflict either corporal or capital punishment, bound together with a red band (Lydus, *De magistr.* 1. 32. 4). Various sources mention lictors laying aside their short togas (Cic., *In Pis.* 55) for *paludamenta* in times of war (Livy 41. 10. 5, 45. 39. 11; Varro, *Ling.* 7. 37), while others mention lictors dressed in red (Silius Italicus 9. 419; cf. Appian, *Pun.* 66). White *paludamenta* wrapped round the waist over red tunics have been restored following a polychrome frieze (Pensabene), as have the ivory crescents worn on the boot as a badge of rank. Also shown are the general's scribes, based on a relief from Gamlitz (Alföldy pl. 20). As non-military personnel they don't wear their tunics girt high up above the knees, ready for action. For the tent, see C. van Driel-Murray.

F: Combat

Roman *antesignani* (**F1, 3**) in combat with cavalry

of the Achaean League (F2). The *antesignani* are equipped with small swords and shields in place of their full legionary equipment. They attack both riders and steeds, striking up at the bellies of the horses and at the legs of the riders. The Achaean cavalry are based on a statue of Polybius and a polychrome terracotta from Corinth.

G: The Army towards the end of the period

Based on the 'Altar of Domitius Ahenobarbus', representing the Army towards the end of this period. **G1** represents a Roman senior officer. His tunic is bleached, for Tacitus (*Hist.* 2. 89) tells us that the tribunes and senior centurions of Vitellius' army wore bleached garments (*candida veste*) during their entry into Rome in AD 69. He wears a bronze muscle-cuirass, helmet and greaves, but the colours of all other details, including the white leather groin-flaps outlined in red, are arbitrary. A decorative head has been restored to his spear, of the type used as badges of rank during the Imperial period. The helmet type is unclear from the relief, but it could be of 'Boeotian' type with cheek-pieces.

G2 wears the *sagum* and white purple-striped tunic of an *eques*. Equestrian boots have also been restored to this figure. His helmet, of 'Boeotian' type, has a yellow plume. Arrian (*Ars Tactica* 34.4) mentions Roman cavalry wearing yellow plumes some 250 years later, but we have no idea when this became standard practice. A gold finger-ring was the sign of an *eques* in the late Republic (Bloch 107).

G3 and **G4**: In accordance with the Kasr el-Harit shield, the rim, spine and boss of the shield are left felt without metal reinforcement. One figure only, it seems, wears a version of the 'Montefortino' helmet, which must by now have become standard, thus the helmets worn by the other figures may be due to artistic licence.

H: The Army during the Jugurthine War

Centurion of a cohort of Sabine auxiliary infantry, perhaps during the Jugurthine War. Some Sabine communities may not have received Roman citizenship, and thus continued to supply allied contingents until the early 1st century (Sherwin-White 206-7). As a centurion he wears a bleached white tunic and a distinctive red crest. **H2** shows a legionary carrying a shield decorated with a geometric pattern. Such patterns, probably based on Gallic prototypes, are shown on a number of archaeological monuments of the period. The rest of the equipment he uses is derived from the Domitius Ahenobarbus altar. **H3** shows a cavalry officer. The shield is based on that shown on the Sextus Appuleius monument, though the colours are hypothetical.

Notes sur les planches en coleur

A1 : Le turban écarlate et les lettres '4LD' en cuivre étaient les seuls éléments distinctifs des uniformes des trompettes par rapport à ceux des simples soldats de cette unité. Notez la salopette longue boutonnée sur la hanche. A2 : Les rapports et livres de compte de l'époque suggèrent cet uniforme, avec une veste d'écurie blanche, coupée court et aux parements bleus. A3 : Le coupe changeait selon les modes et il y avait des variations dans la teinte des parements bleus mais le même uniforme de base est resté utilisé de 1779 à 1783. A4 : L'uniforme réglementaire des Dragons Légers Continentaux fut adopté fin 1781.

B1 : Les détails intéressants de ce costume sont tirés de numéros de 1780 et 1781 du journal de Philadelphie, Freeman's Journal & Weekly Advertiser. Le 'watchcoat' rouge, un manteau utilisé par les sentinelles forcées de monter la garde pendant les nuits froides, est particulièrement intéressant. B2 : La source utilisée pour cet officier ingénieur est un portait du Chevalier de Cambray-Digny par Charles Willson Peale. B3 : Ce conducteur de chariot, décrit dans le journal Pennsylvania Packet, porte pratiquement des vêtements civils.

C1 : Ce soldat démontre des influences espagnoles dans le col de son manteau court et porte un chapeau, un mousquet et une cartouchière espagnols. La France n'était pas la seule source pour les agents d'approvisionnement américains. C2 : Intéressant uniforme de 'frontière' porté par cette compagnie d'état. Notez le calot, les mocassins et les jambières. C3 : Les archives d'état décrivent ce costume, fourni à la milice d'infanterie de Caroline du Nord, lors de leur recrutement. C4 : Uniforme enregistré pour Giles's Troop de la cavalerie de milice de Caroline du Sud.

D1 : Ce membre de la fanfare a reçu un manteau intercepté qui devait servir à un sergent de l'armée britannique. Ces manteaux rouges correspondaient à la mode contemporaine qui voulait que les musiciens portent un manteau de couleurs 'inversées', par exemple dans le cas de l'infanterie américaine, des manteaux rouges aux parements bleus. D2 : Les galons et épaulettes sont les caractéristiques notables de cet uniforme. D3 : A partir d'un portrait contemporain de Thomas Forrest par C.W. Peale.

E1 : Ce soldat de Géorgie porte, au lieu du manteau conventionnel, un 'gilet à manches' et noter le 'kilt' par dessus la salopette, vestige du costume de travail des paysans et des marins européens que les rangers ont porté sur la frontière américaine pendant la guerre franco-indienne et la guerre révolutionnaire. E2 : Notez les pans de manteau courts et le chapeau 'en éventail'. E3 : Tiré de documents ayant survécu et d'une miniature représentant le Brigadier Général 'Mad' Anthony Wayne, le commandant distingué des troupes légères. E4 : Tiré de documents

privés et d'état ayant survécu. Notez l'utilisation inhabituelle de deux couleurs de parements sur les revers, le col et les épaulettes.

F1 : L'uniforme de cette légion de volontaires sur l'établissement Continental vient en partie d'un portrait contemporain du célèbre 'Light Horse Harry' Lee de Virginie, père du Général Confédéré de la Guerre civile, Robert E. Lee. F2 : Notez le casque français, l'épée et la ceinture portés dans cette légion, commandée par le colonel français Armand, dont le portrait a survécu. F3 : Les livres de comptes contemporains et autres documents prouvent l'existence de cet uniforme. Remarquez la 'veste de marin' verte. F4 : Un des cinq régiments à pied 'supplémentaires' habillés de divers uniformes qui ont été fusionnés dans la ligne Continentale en 1779-81.

G1 : En 1782, les troupes du New Hampshire, qui avaient bien besoin de se faire ravitailler, furent les premières à recevoir une partie des grands stocks d'uniformes britanniques capturés sur les mers. Les manteaux rouges étaient teints en marron. Les étoiles blanches sur la poitrine étaient une affectation ajoutée après l'émission. G2 : Les compagnies d'infanterie légère fournies par chaque régiment pour former, à diverses périodes, un Corps Léger qui comportait jusqu'à 12 bataillons étaient considérées comme des appelés temporaires et n'avaient donc pas droit à un uniforme distinctif, mais leur commandant Anthony Wayne autorisa un calot d'infanterie légère caractéristique avec un cimier en crin. La ceinture et le porte-épée identifient le rang du sergent. G3 : Couleurs renversées typiques et décoration supplémentaire d'un uniforme de tambour. G4 : Un autre exemple d'un manteau rouge britannique capturé teint en marron avant d'être fourni aux troupes américaines.

H1 : Notez les 'manchettes de dragons' sur le manteau et le fait que la baïonnette est fixée en permanence car on ne distribuait pas de porte-baïonnette. H2 : Notez le manteau, les chaussures indiennes, le calot en cuir et l'étendard du régiment. H3 : Encore une fois, notez le calot spécial avec un badge en forme d'ancre et une frange blanche. H4 : La salopette est en 'ticken' rayé (comme c'était souvent le cas), tissu bon marché utilisé par exemple pour couvrir les matelas. Notez le chevron blanc qui indique trois ans de service et institué en juillet 1782.

Farbtafeln

A1: Die Uniformen der Trompeter unterschieden sich lediglich durch den scharlachroten Turban und die Messingaufschrift "4LD" von denen der Soldaten dieser Einheit. Man beachte den langen Overall, der bis zur Hüfte geknöpft ist. A2: Diese Uniform beruht auf Angaben in Offiziers- und Buchführungsunterlagen der damaligen Zeit und weist eine kurzgeschnittene, weiße Reiterjacke mit blauen Aufschlägen auf. A3: Obgleich sich der Schnitt mit der Mode änderte und der blaue Farbton der Aufschläge ab und zu Änderungen unterlag, trug man von 1779 bis 1783 die gleiche Grunduniform. A4: Die vorschriftsmäßige Uniform für die "Continental Light Dragoons", wie sie Ende 1781 eingeführt wurde.

B1: Die interessanten Details dieser Uniform beruhen auf Ausgaben der in Philadelphia erscheinenden Zeitung "Freeman's Journal & Weekly Advertiser" des Jahres 1780 beziehungsweise 1781. Der rote "Wachmantel" - ein Mantel, der an wachhabende Soldaten ausgegeben wurde, die in kalten Nächten Dienst taten - verdient besondere Erwähnung. B2: Die Quelle für die Abbildung dieses technischen Offiziers ist ein Porträt des Chevalier de Cambray-Digny von Charles Willson Peale. B3: Wie in der Zeitung "Pennsylvania Packet" beschrieben, trägt dieser Wagenfahrer praktisch Zivilkleidung.

C1: Bei diesem Soldaten sieht man den spanischen Einfluß am Kragen seiner kurzen Jacke. Außerdem hat er eine spanische Kopfbedeckung, Muskete und Munitionsetui. Frankreich war nicht die einzige ausländische Bezugsquelle für amerikanische Versorgungsagenten. C2: Interessante "Frontier"-Uniform, wie sie von dieser Staatskompanie getragen wurde - man beachte die Mütze, die Mokassins und die Leggings. C3: Diese Uniform, die an die Miliz-Infanterie in North Carolina bei der Anwerbung ausgegeben wurde, ist im Staatsarchiv beschrieben. C4: Akten weisen diese Uniform für die Giles's Troop der Miliz-Kavallerie von South Carolina auf.

D1: Dieses Mitglied der Militärkapelle erhielt einen beschlagnahmten Rock, der ursprünglich für einen britischen Armeefeldwebel vorgesehen war; diese roten Waffenröcke entsprechen der gängigen Mode, nach der die Musiker Jacken mit "umgekehrten" Farben trugen, d.h. im Fall der amerikanischen Infanterie rote Jacken mit blauen Aufschlägen. D2: Bei dieser Uniform sind besonders die Ecken und die Schulterklappen von Interesse. D3: Diese Abbildung beruht auf einem zeitgenössischen Porträt von C.W. Peale, das Thomas Forrest zeigt.

E1: Dieser Soldat aus Georgia trägt anstelle des herkömmlichen Mantels eine "Weste mit Ärmeln"; man beachte auch den "Kilt" über dem Overall, ein Überrest des Arbeitsanzugs für europäische Bauern und Matrosen, den man bei den Rangern an der amerikanischen Grenze im Französisch-Indianischen Krieg und im Revolutionskrieg sah. E2: Man beachte, wie kurz die Rockschöße sind, und den "Fächerschwanz"-Hut. E3: Die Abbildung beruht auf überlieferten Aufzeichnungen und einem Miniatur-Porträt des Brigadegenerals "Mad" Anthony Wayne, dem renommierten Kommandeur der leichten Truppen. E4: Diese Abbildung beruht auf überlieferten Staats- und Privatunterlagen; man beachte die ungewöhnliche Verwendung von zwei unterschiedlichen Farben bei den Verblendungen am Revers sowie den Kragen und die Schulterklappen.

F1: Die Uniform dieser freiwilligen Legion bei den Kontinentaltruppen beruht teilweise auf einem zeitgenössischen Porträt des berühmten "Light Horse Harry" Lee aus Virginia, dem Vater des Generals der Konföderierten Robert E. Lee im Sezessionskrieg. F2: Man beachte den französischen Helm, das Schwert und die Gürtel dieser Legion, die vom französischen Colonel Armand angeführt wurde, dessen Porträt erhalten ist. F3: Buchführungsunterlagen und andere Aufzeichnungen aus der damaligen Zeit belegen diese Aufmachung; man beachte die grüne "Matrosenjacke". F4: Eines der fünf "zusätzlichen" Fußregimenter mit unterschiedlichen Uniformen, die 1779-81 mit der Kontinental-Linie fusionierten.

G1: 1782 erhielten die New Hampshire-Truppen, bei denen die Versorgungslage besonders schlecht war, als erste Uniformen aus einem größeren britischen Bestand, der auf See beschlagnahmt worden war; die roten Jacken wurden braun eingefärbt. Bei den weißen Sternen auf der Brust handelt es sich um eine nachträgliche Verzierung. G2: Die leichten Infanterie-Kompanien, die von den einzelnen Regimentern gestellt wurden und von Zeit zu Zeit ein leichtes Korps mit bis zu 12 Bataillonen bildeten, wurden als zeitweilige Soldaten betrachtet und erhielten daher keine charakteristische Uniform. Doch ihr Kommandeur Anthony Wayne genehmigte typische leichte Infanterie-Mützen mit Roßhaarbüschen. Die Schärpe und der Schwertgürtel bezeichnen den Rang eines Feldwebels. G3: Die typischerweise umgekehrten Farben und zusätzliche Verzierungen auf der Uniform eines Trommlers. G4: Ein weiteres Beispiel einer beschlagnahmten britischen roten Jacke, die vor der Ausgabe an die amerikanischen Truppen braun eingefärbt wurde.

H1: Man beachte die "Dragonermanschetten" an der Jacke; außerdem sollte der Umstand erwähnt werden, daß das Bajonett stets an der Waffe befestigt getragen wurde, da kein Bajonettgurt ausgegeben wurde. H2: Man beachte den Mantel, das indische Schuhwerk, die Ledermütze und die Regimentsstandarte. H3: Man beachte wiederum die besondere Mütze mit dem Ankerzeichen und den weißen Fransen. H4: Der Overall war - wie oft - aus gestreiftem "Drillich", einem gängigen und preiswerten Material, aus dem man z.B. Matratzenbezüge machte. Man beachte den weißen Winkel, der eine dreijährige Dienstzeit bezeichnet und im Juli 1782 eingeführt wurde.

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Avec annotations en francais sur les planches en couleur.
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